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INDIAN ECONOMIC PROBLEMS

OR

THE WAY TO PROSPERITY

*IN THE LIGHT OF ADVANCED KNOWLEDGE
AND RECENT EXPERIENCE*

By

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VAKIL

VIZIANAGRAM

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To
The untold Millions of India's
Starving Poor who sweat and
toil and take life with
Oriental Fortitude
that passes
praise.

PREFACE

My humble endeavour in the pages of this little book is to present in as short a compass as possible the facts and principles, the objects and ideals of Economics, not ignoring the historical background however, and the rich experience of the West got at too great a price and with no little bitterness and not avoiding, but explaining the meaning and significance of technical words, whenever they occur, so that the reader may never feel strange with any book on the subject he may come across.

The subject is an all-important one, embracing every phase of materialistic progress. To be a success in the workaday world or be a good citizen, and do one's duty well, and in the right way, a sound knowledge of Economics is quite indispensable.

The subject is vast, abstract, highly technical, and, perhaps, uninteresting to many. The complications are never so great as to-day, and with none so much as with us. We are still in the infancy of our economic life. The progress so far made is little and halting, and we at every step feel the need for encouragement and direction.

The matter is sought to be presented in as concrete a form as it is possible, and information from different shades is sought to be given and no view-point, so far it lies in me, left unmet. It by no means follows that the book is either complete or faultless. It at the most is enumerative, but by no means exhaustive. Faults there are, and wont to be faults of commission and omission for which I crave the kind indulgence of the learned reader. In the matter of collection, collocation, and appreciation of facts and figures from different conflicting sources, and in the matter of discussing the soundness or otherwise of old theories and principles, and the scope of new ones that are, and yet to be, I have had great difficulties.

In all humility and frankness I invite suggestions from every quarter, and hope to insert the same hereafter if the work is fortunate enough to run through further impressions.

I acknowledge my deep indebtedness to Prof. M. Venkatarangayya, Reader in the Andhra University, for his able and instructive lessons in

his own simple inimitable way in the early years of my initiation into the subject. I cannot, however, pass over without expressing my sense of gratitude to the numerous writers and thinkers on the subject, Indian and foreign, dead and living whose articles and works I have had the advantage and pleasure of studying. I thank Messrs. R. Bangarayya K. Ch. Subhramanya Sastri and V. Brahmaj Rao for kindly perusing the manuscripts and making valuable suggestions. My thanks are also due to Mr. Har Narain, Manager, Dayalbagh Press, for having seen the work through the Press in as short a time as possible.

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S. LAKSHMINARASIAH

INTRODUCTION

Desire for wealth is as universal as any other passion of the mind, and no less intense, or perhaps more intense, than any other. It is innate in man, part and parcel of his nature and the motive-spring of human action.

Material progress is the slow growth of ages. The multiplicity of human wants, the love of fashion and display, the craving for variety evoke human thought and action and lead to invention after invention. Every generation is, therefore, an heir and a transmitter—inheriting the accumulated wealth of the ages past, and leaving it to its successor, adding, if possible, something to it.

Love of wealth is a selfish passion, deep-rooted in human nature. Man courts wealth, and wants to possess as much as possible exclusively for himself. There are not wanting persons whom it has not swayed, but such men are rare, and prove the exception rather than the rule. The danger is all the greater when it is no longer a means to an end—but an end in itself the be-all and end-all of life. The endless increase in human wants and the ceaseless craze for wealth bring in intense suffering and misery to untold millions with no corresponding happiness to the seeker. With the new era of scientific invention and discovery it has intensified and brought to a head the struggle between capital and labour.

Western society is now adrift, where and to what end it is not easy to predict. So far the solutions found are unavailing. Her thinking men are sick of the situation, and dark and dreary is the future. Why not reduce the number and intensity of wants, and avoid all this with the reservation however 'that they give place to other wants of a nobler kind' for fear of thrusting social life to animal level? It is well in its way. But can selfish-love of wealth and power be easily surmounted?

Philosophers sometimes decry Economics as being inimical to moral progress. Material progress, they say, spells moral degradation. Says the Bible, 'It is easier for a camel to go through the eye of a needle than for a rich man to enter into the kingdom of god'. It is said that Athens, Rome and Egypt have fallen when at the height of their material progress.

That material advancement is quite essential for a healthy, happy earthly existence is an undeniable fact. Without wealth there can be no progress: political, social, religious or any other. When man is not above the reach of want, and is always occupied with the satisfaction of the same, there can be no leisure and no scope for the development of knowledge. Athens, Rome and Egypt could not have risen to the heights of civilization but for the fact that they were Nature's favoured spots. With enough to eat and live by, their sons were free to devote themselves to higher and nobler ends.

Progress of every kind is based on sound economic existence. Political growth, artistic achievement, scientific discovery, speculative philosophy and the like are next to impossible where people groan under grinding pauperism. Intensely spiritual ancient India did not neglect the material side. She could not have achieved a tithe of what she has in the domain of religion, philosophy, literature, art, science, were she a nation of inert, inactive and indolent philosophers.

People no less nations, are today mostly occupied with the earning of wealth. It dominates all other desires because in it lies the fulfilment of all the rest. It confers a high social status, bestows political rights and privileges and secures a happy earthly existence. It helps education and sanitation, and encourages arts, crafts and industries. It means power and prestige, position and honour. It makes life well worth living and fighting for. Without it social uplift and national regeneration are next to impossible.

Money we must have or we cannot all of us reasonably be moral. The ideal of total renunciation that religion holds up is an ideal that a few fortunate souls strive for, and a fewer still do really realize. With the ordinary human beings, who are of the earth, earthy with flesh and blood in them, it is otherwise. But the test of real prosperity is not, however, the number of millionaires a country has, but the absence of unemployment amongst its people with plenty to eat and drink and live by. Hence the importance of Economics. It today dominates and controls all relations, politics and policies.

Science is systematized knowledge, exact and precise. Sciences may broadly be classified under two heads, physical and social. Physics, Chemistry and the like come under the former head, while Economics, Politics and Ethics come under the latter. Physical sciences deal with natural phenomena, while social sciences deal with man's relations with his fellow-men. They arise and assume importance when man comes into contact with man, and society develops.

Economics concerns with a particular branch of human activity, of man's dealings with man in so far as they relate to production, distribution and consumption of wealth. Rent, interest and profit arise only when man settles to the peaceful pursuits of agriculture and commerce.

The fundamental laws of Economics are universal. They operate in a primeval forest much the same way as in a civilized society. They are as true of the half-naked savage roaming the woods as of the fashionable gentleman with a long hat, a stiff collar and a fine car to boot. The Law of Supply and Demand, the Law of Marginal Utility and the Law of Diminishing Returns are true at all times and in all climes.

But Economics falls short of the exactness of physical sciences, which at all times yield certain results, and are capable of being experimented upon. They are invariable and universally true. Economic laws, on the other hand, are based on observation and inference, and operate within certain limits under given conditions. In the absence of counteracting forces they can be relied upon with certain reservations. What is true of one country is not of another differently situate. Again, of the same country what is true at one period does not hold good for all time. The Malthusian Theory of population, and the Ricardian Law of Iron Wages, though good in their day, no longer hold the field. Great Britain, the champion of Free Trade for ages past now finds it to her advantage to veer to the side of protection.

Most of these laws proceed on the assumption that free competition is the rule. But where society is non-competitive, and, where rent, interest and wages are for the most part regulated by custom and usage these have no application at all. They are at the most relative, but in no way absolute. Again, there is always the contingency that the Government of a State may at any time lay down the rate of wages that labourers are to get or fix the rent that landlords are to receive, or restrict the free flow of exports and imports. The laws may thus be suspended and rendered inoperative.

Economics is an art as well. Man reacts on Nature, and produces things. As we have seen his relations with Nature come under general laws, while those between himself and others are classed under social laws. Production precedes and presupposes consumption, and consumption is the end of all production. Both as the producer and consumer man is the central figure. The social laws unlike general or physical offer ample scope for the full play of human qualities. Intellect, ingenuity, craft and skill are in constant demand at every stage in the organization of land, labour and capital for production in the matter of

consumption as well as in the modes and methods of advertisement and salesmanship. With an art element Economics is capable of infinite development.

The subject is generally treated in strange isolation as one that has nothing to do with others. Such a practice is opposed to true scientific spirit. Economics, Politics, Religion, Science, social and sanitary conditions act and react on one another. Where, for instance, people live half-famished amidst insanitary conditions, afflicted with frequent fevers and diseases with little energy and no stamina, there can be no healthy economic growth.

Economic ideals are in the main the outcome of existing economic conditions. In ancient Greece agriculture was in the hands of slaves. The freeman was absorbed in Politics, and free labour was unknown. Aristotle and Plato, the eminent thinkers of the day, considered slavery to be an indispensable part of the ideal State. They could never think of the capitalistic production, the position of modern labour, the ideas and ideals of different schools of socialistic thought. Again, in all early societies there was no borrowing for commercial purposes. Money was borrowed either to meet an urgent need or to relieve a distress, and taking of interest was in consequence considered sinful.

Being mostly in the hands of Churchmen, economic progress made little headway during the Middle Ages. Religion and literature engrossed their best attention, and Economics interested them but little. Competition was unknown; trade and industry were regulated by guilds; and society was stationary. The laws of work, the rates of wages, the prices of goods were all regulated by man. With the Crusades a great change came about. The 'barbarous' West came in contact with the 'enlightened' East, and commerce increased apace.

The discovery of the New World, and the consequent inflow of hordes of precious metals into Europe marked another distinct stage. Of the rich treasures of Peru and Mexico, Spain had the largest share, and waxed fat. Under powerful potentates with nationalistic ambitions France, Portugal, Holland and England came to regard wealth as a potent factor in increasing their strength and power, and in furnishing the sinews of war. Competition began and commercial rivalries ensued.

The nineteenth century was an era of scientific discoveries and inventions. The application of science to methods of production and transport revolutionized the industrial phase of Europe. The introduction of machinery increased production on a scale undreamt of before, while

the steamship and the railway extended the field of commercial activity to the farther-most corners of the earth.

Commercial rivalries came to a climax and culminated in the Great War in the early years of the twentieth century. Schools and colleges became factories for making munitions of war. Students and professors fought side by side with labourers. The after effects of the war were found to be deadlier still. Commerce perished, and national debt increased.

Scarcely has Europe recovered from the wreckage when another war – a greater one than any the world has ever witnessed – gave a shocking set-back to our civilization. No clash of arms, no thundering of guns, no splitting of human blood do we see, but in its effects it is deadlier still and far more horrifying. The field of its operations knows no geographical limits. It is extensive through the length and breadth of this wide world. The war we speak of is no other than the financial war of the early thirties of the century. It brings in new theories, explodes or exposes the existing ones. It has brought the forces of nationalism and inter-nationalism, protection and free trade, cooperation and competition into clash and conflict.

The expansion of trade and commerce has brought distant lands into closer ties of economic union. The steamship, the railway, the telegraph, the post office, the wireless and the radio are come to be looked upon as matters of common concern and international importance. The universal peace and the brotherhood of man, the dream of the poet and the hope of nations are believed to be well-nigh on their way to realization. But the growing spirit of nationalism that followed the Great War gave a rude shock to our expectations, and the day of that happy consummation is perhaps, the leagues and conferences notwithstanding, as far distant as ever.

For decades free trade has been an article of faith with the world's leading nations. Protection has today usurped the place of free trade, and is looked to as the solvent of the economic ills they are subject to. Whatever name it goes by—whether it is called protection, imperial preference, Ottawa Agreement or Swadeshi movement, no matter the nomenclature—the thing remains the same.

Competition is at the basis of material progress. Without it there can be no economic development. The modern economic thought, the laws of supply and demand, the wages of labour, the profits of capital, and the rents of land proceed on the assumption of its existence. It is

believed to lead to emulation and healthy rivalry. But in actual practice it has gone the wrong way. It has taxed man's faculties to the full to devise ways and means of production with inferior stuff for sale at cheaper rates and is in danger of being engulfed by its own 'cut-throat competition'.

To avoid all possible loss trusts, cartels or combinations have been organized both for the purchase of raw materials, and the sale of finished articles. It has now come into close grips with a new foe that has appeared on the scene. Cooperation is no doubt an old idea newly developed, of course, with great future potentialities. It seeks to construct society anew on strong sound foundations. It may pertinently be asked: Are not trusts or combinations a form of cooperation and if so, where is the enmity between the two? The short answer is while the underlying principle of true cooperation is self-help. Self-development for the good of its members, the guiding motive of the other is exploitation of others—the prime producer, the sweating labourer, the ultimate consumer for selfish gain.

Competition has distorted man's mental and moral outlook by giving currency and adding strength to such expressions as 'the struggle for existence' and 'the survival of the fittest'. They are expressions from animal life and are on the lips of every one. To apply them to man is to overlook the fundamental fact that he is essentially different from his kindred in the animal kingdom. Pushed to its logical conclusion, 'Struggle for existence' means the elimination of the weak and the infirm, the young and the old unable to live and protect themselves. As with animals in their wild state it has no place for any except the physically strong, the furious, and the cunning.

The other expression 'Survival of the fittest' is no less familiar. It is quite as ghastly, and no less harmful than the other. 'Fittest' does not mean what it should. The strong, the intelligent, the crafty and the cunning, the mean, and the lowly are the real survivors. The rest, though they be the best, and the noblest must starve and perish. If the man is to proceed on what the expressions connote where is the need for the improvement of sanitation, education, social service, and all that goes in the name of humanitarian work—private or public? The truth of it is that unlike other animals man is capable of infinite development provided facilities are given, and the seemingly weakest and the most unfit may become the really 'fittest', not in the sense or no sense in which that term is used, but in the true acceptance of the word. Co-operation in some form or other—whether in the form of co-operate local bodies or Hindu joint family, or modern societies with social, educational, economic

and moral welfare and improvement as their aim and object has come to the aid of the weak and the infirm, the indigent and the ignorant, the poor and the helpless, and with its ever active helping hand has healed many a social and economic sore, and made life brighter and happier.

So much about the conflict in the economic world. About science in relation to industrial progress still a word to say. Ours is an age of science. It is being introduced in every walk of life. In industry it is the predominating factor. Scientific invention and industrial development have walked the way hand in hand. Mechanistic methods have increased production a thousand-fold. Over production and under-consumption are now the ills the world is suffering from. Man has for long doted and prided that he has obtained mastery over Nature and harnessed science to subserve his ends.

In his own anxiety to outvie others man has put in motion the giant force but lost power of control and direction. It proved too strong for him, and the master has become the virtual slave. It has intensified the problem of unemployment. In point of extent and intensity the economic depression of recent years is the greatest the world has ever been a witness to since it began. But of these more fully in the pages following.

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PART I

THE DRIFT OF MODERN INDUSTRIALISM

INDIAN ECONOMIC PROBLEMS

CHAPTER I

WEALTH, UTILITY, VALUE & PRICE

WEALTH means and includes every kind of property, which is capable of exclusive ownership, possession, and enjoyment. Lands, houses, domesticated animals, raw and finished products, and such others as can be valued in terms of money come under the description. Money is wealth, but it is not coequal and coextensive with the term 'wealth', which is more comprehensive, including a good many other things as well.

In order to be wealth a thing is to be of use. But all that is useful is not wealth. If a thing is to be wealth at all, every unit of it must be of some importance to the owner. Air, water, and light are instances familiar to everyone, that do not fall under the definition. There is no question of their utility. Without them there can be no existence, no life at all. Yet they are not wealth because Nature has been so lavish in her supply that no unit of it is of any consequence to us.

But with the changed conditions of modern life, even these things have acquired an importance, and a value. In big towns and cities, the supply of water and air is regulated by public or semi-public bodies. Being scarce they have secured a value and we have to pay a price for their use by way of a tax or a cess. To constitute wealth a thing must be limited in quantity, and must have a utility, and an exchange value.

Utility is the capacity of a thing to satisfy a particular human want. The utility of a thing depends on place, time, and form. A thing would have little or no utility at the place where it is found in abundance. The different kinds of wood, and forest produce would be of no use at the place of their growth. They are of use only when they are brought to the places, where they are needed. By cheap and easy transport the steamship, and the railway have promoted this kind of utility. Time sometimes confers a special utility on things. Old paintings and works of art are highly valued, and old wines are reputed to be the best. In its natural state a thing may not be of any use. But new forms do sometimes give fresh utilities. Metals made into implements of industry, and household utensils, yarn woven into cloth, and cloth transformed into clothing to suit the varied wants and tastes of man create what are called 'form utilities.' When we speak of the production of wealth, we mean the various utilities we create. Production may, therefore, be said to be another name for creation of utilities.

The Law of Final Utility

The satisfaction we derive by consuming a thing diminishes with every addition to the quantity. Consumption may at first evoke the desire for the thing consumed. But we will soon reach a point—the point of satiety or full satisfaction—when every addition diminishes the intensity of desire and the utility for it. The decrease in utility of the successive units of goods of a kind makes itself felt even on a savage if he works too long in any occupation. So if he has much meat on hand, he turns to hewing out caves, fashioning bows, and arrows.

The law of 'final utility' fixes the point at which such a producer stops one kind of production and begins another. Purchases in a modern market are directed by the law of 'final utility.' In making purchases the modern man consults the law. Modern society no less than the isolated man turns its energies from one work to another for fear of an over-

supply of an article, which means a 'social glut' of a specified kind. Otherwise it leads to a fall in price. The final point is sooner reached in countries where social wants are few than in advanced states. It is a universal law of economics.

In the case of money, however, the workings of the law are not perceptible. It is because money is not like any other commodity capable of satisfying a particular want or series of wants at the most. It is the sure means of satisfying all civilized wants, infinite and varied. It enables us to rise in social status, to secure political rights and privileges, worldly position, power and honour. A means to many ends, its earning is being pursued by all not excepting the millionaire, and the multimillionaire.

Value and Price

It is not easy to distinguish these two terms. Value is estimate of prospective enjoyment or utility. It presupposes comparison with, and implies the existence of another thing sought in return either to relieve a necessity or to secure an enjoyment. Price is the same thing as value expressed in terms of money—whether it be the English sterling, American dollar or Indian rupee. It is the measure in terms of exchange which the seller demands from the buyer for sacrifices incurred by him in producing a commodity.

Price and value are a social phenomenon. There is nothing like 'intrinsic value' or price of a thing. Values are given, and prices offered by society under the influence of the law of final or marginal utility. The price of the quantity purchased is in the long run determined by the utility of the last unit of a commodity.

Values and prices generally coincide. If on account of fluctuation, or for any reason, price does not meet value, the desire is to be satisfied by some alternative or else values rise. If high values continue even after successive transactions of sale and purchase, prices go up and sellers rush in and disturb the market.

To the casual eye the seller seems to have all the advantages of the situation. He names a price, and makes


a market. Buyers may refuse the price offered, but the quotation may not be lowered. Outside buyers, ignorant of the situation, may accept the old price.

But in the prolonged struggle he is under a serious handicap. He has committed himself to the sacrifices required for the production of the thing he sets up for sale. When he comes to make concessions, the fixed prices he names are a clog to him. For the sake of good-will he has to swallow losses. Besides, to avoid the risk of holding doubtful stocks for a new season, he has to announce periodical clearance sales by lavish advertisement



CHAPTER II

DEMAND & SUPPLY

HE value of a thing depends upon demand and supply as well. The higher the value of a thing, the greater is the demand for it. Conversely, with the fall in value of a thing, the demand for it diminishes, and supply comes to a stop. The word "Demand" means efficient or effective desire. Mere desire is no demand. In order to be 'demand' the desire must be capable of being fulfilled. Many of us may have a desire to own a car, but how many of us are really capable, financially speaking, to realize it? Even of those that can purchase, all are not willing to have it at the same price. If the price is high, few will purchase; if low, more will go in for.

The price we pay is the measure of utility we get. It is the marginal or final utility that always counts. A person who goes in for one apple may be willing to pay 4 annas for it, 3 annas for a second, something less for a third, and so forth because the satisfaction he gets or is likely to get with the successive increase in stock decreases till the final point, which is the determining factor of price of the stock purchased, is reached.

Demand is said to be elastic when as for a slight fall in price there is a great increase in demand. In the case of luxuries a little fall in price leads to a great rise in demand. It is also the case with regard to commodities that can be put to a variety of uses. But with the necessities of life it is otherwise. The quantity demanded for consumption remains constant with little reference to the rise or fall in price.

Demand tends to increase to the point of capacity. The final limit of demand is the capacity of man for satisfying the want with money. An unsatisfied demand has a tendency

to rise until it is arrested by the incapacity of the buyer to pay the price put.

It is at this stage that the "law of substituted demand" comes into operation. It becomes an effective demand for the original object at a lower price. The demand is then for one of two things—"the next best or the just as good."

Demand vanishes when it is satisfied. But it reappears after an interval. Demands for particular kinds of articles for festivals and marriages, and for particular seasons come under this category. When there is a fall in price due to a great lowering of the cost of production, demand appears in many while it disappears in some individuals. On account of the elasticity of demand for luxuries, it is operative more in the world of fashion than in any other. Due to the scientific methods of production, and the consequent fall in price, markets in modern times are ever widening; and the action of increasing demand is counteracted.

On the way from the producer to the consumer an article passes through a large number of transactions of sale and purchase. The several stages are not demand strictly called. They are intermediate or trading demand, not being for consumption. The simple demand is, therefore, the 'final demand.' The wants and capacity of the final consumer determine the prosperity of the markets—the manufacturer, the middleman, the retailer and a host of others interested in a particular commodity. So they always have their eye on the final consumer. Consumer's demand pertains to future, and is estimated by anticipating the future buyer.

Demand has further an element of uncertainty about it. A change in taste or a change of fashion, a new invention or discovery of a substitute or a fall in the income of people tends to contract demand sometimes to the point of total extinction. There is thus a great possibility of variation. The personal factor is so powerful that any accident up to the last moment may upset all calculations. Under the complex conditions of modern production it rises into regions of speculation. In meeting demand the manufacturer, the middle-

man, and the retail dealer has each a part to play. In determining the out-put of a thing the manufacturer is to an extent guided by the middleman's orders for supply.

Manipulation of Demand

'If demand were left to itself supply in business could be undertaken only by rich individuals or by powerful corporations.' In many trades the small producer has been superseded by large corporations. In some small industries, however, he holds his own because he is better able to follow the vagaries of demand, and maintain personal touch with his customers, which the large firms cannot do. It is the case in trades like photography, shoe-making etc. It is given to a few to recognize where, when, and how to sell the things they find it easier to make. The majority of men are yet to learn the art of sale in the hard school of experience.

Art of Sale

Of production and sale the latter is by far the more difficult. In the modern world selling is a difficult and complicated process. Sale depends on consumption, and consumption has to depend on the variable, capricious and artificial nature of human wants. The assumption that a man knows what he wants, and when, and how to buy the thing he desires is far from true. The ordinary man does not know what he wants; and most of those that know, do not get what they want. Spending is a more difficult task than that of earning. Man does this by becoming a creature of habit and imitation. Both for necessities and luxuries of life he is seldom without an alternate satisfaction. Even for the poor there is considerable room for choice. Imitation, taste or caprice dictates a great variety of alternate enjoyments, which with the lapse of time narrow down into habits.

Instability is, therefore, the special characteristic of demand. It appears, disappears, and reappears. So the position of the seller is neither easy nor enviable. He has to secure, and retain customers. He is to live with them,

make friends with them, and build personal connections by good manners, hospitality, and exchange of favours. More than these he has to seek customers wherever they are either personally or through agents and induce them to go to him.

Advertizement is not confined to newspapers alone. The poster, the pamphlet, the catalogue are some of the forms. The expense of this branch of selling enterprise is borne in varying degrees by all departments of sellers. Sending out commercial travellers or agents is not uncommon. In some trades where competition is very keen one is shocked to note the misrepresentations of agents, and the adulteration of things. From an economic point of view these gains are the reward of selling skill when the commodity offered for sale is worthless.

For success in sale persuasion is essential. Advertizement is but an effective, and artistic form of it. It is the accompaniment of free trade, and world competition. It keeps up demand when it tends downwards. But it often becomes the parent of fraud and mischief. Its natural drift is always towards deception, and corruption. In a new trade a bad shop-keeper with the aid of an expert advertizement-writer may make a better show than his rival, who is an expert in the production of the article. Nowadays it costs more to advertize than to produce. When well done, advertizement might secure a profit; when neglected, it would lead to loss and ruin.

Supply

Value arises out of utility and restriction of supply. If the supply of a thing is unlimited like air there can be no use for every unit, and no value at all. The supply of natural resources such as fertile lands, navigable rivers, mines, forests etc., though large is limited. Production is the result of human labour and sacrifice, which are not capable of indefinite expansion. Further, there is a limit to the amount of capital at the disposal of persons or corporations. The cost of production is the factor restricting and regulating supply.

In agriculture effort and expenditure increase return to a certain point, and then the return falls away. On a given plot the output does not increase in proportion to every successive accretion of capital and labour.

In manufacture when conditions are not restricted, the law of Increasing Returns operates. For every successive investment of capital and labour there is a corresponding increase in output. Even here the output cannot indefinitely be increased because of some restricting influence such as a scarcity of capital, raw materials, the exhaustion of water supply or some other natural facility. Here as elsewhere supply is governed by what may be called the laws of contracting facilities of production.

But with all these under modern conditions of large scale production, supply does not follow demand. Large stocks are being produced begging to be converted into cash. The result is over-supply. Demand is to be stimulated or created to keep pace with supply. The selling part of business has in consequence become more difficult than the producing part. Competition has become so keen, and sale so difficult and risky that companies engaged in a trade find it to their advantage to secure monopoly by forming into what are called trusts.

So the dictum of economists that Demand and Supply, the quantity demanded and the quantity supplied, if unequal at any moment, will be made equal by competition, though true as a theory, the limitations imposed are more important than the law itself.

Factors that Determine Supply—Cost of Production

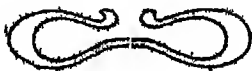
That 'price depends upon the cost of production' simply indicates the belief among some economists that selling is a mere mechanical process, and the real factor is the cost of manufacture. Suppose a milling machine is adopted by two firms, one in the United States and the other in England. By lowering the supply price the Englishman may look for increased profits, while the American may call his machine by

a new name and advertize it for all it is worth, and a good deal more. He may charge a higher price than his English rival, and being better known, his machine may secure a higher price.

In passenger traffic, though the cost of carrying passengers is the same, the railway company loses on the higher-priced seats and makes up the loss by the third class traffic. There are some articles whose supply is limited once for all and the cost of production has no bearing on the supply. Original paintings, old manuscripts, and relics of Saints and prophets are of this class. They sometimes fetch a price higher than that we can conceive of, and quite out of proportion to the cost. To the poor as well as those that have no refined taste or religious fervour they may have no value at all. But those that have a special taste or liking may highly pay for them. What really counts is intensity of desire or utility, and not cost.

But in an indirect sort of way cost of production may be said to determine supply. Suppose there are 100 mills engaged in the production of cloth. The average expense per yard of cloth can never be the same in all the mills. Old firms may have a good many advantages such as the services of experienced managers, skilled labourers, the investment of large capital, and the introduction of up-to-date machinery. The price we pay must cover the cost of the marginal firm producing at the heaviest expense. Otherwise, it will go on short work or quit the line, and thereby bring down the future supply.

In its comprehensive sense cost of production means the net or real cost such as interest on capital, cost of raw materials, the wear and tear of machinery, the wages of labour as well as the cost of selling and marketing under modern conditions.



CHAPTER III

MONOPOLIES, & BUSINESS ORGANIZATIONS

WHEN there is no alternative satisfaction, demand rises up to the limit of capacity. It is on the law of rising demand that monopoly is founded. From the point of supply monopoly consists in the control over supply. Monopoly is opposed to competition. Under free competition prices have a tendency to conform to the cost of production whereas under monopoly prices have nothing to do with the cost of production. Competition yields normal returns to labour and capital whereas, monopoly often fetches high returns.

Mill defines it as 'a thing which is limited in quantity even though its possessors do not act in concert.' Sidgwick puts it as 'the control exercised by an individual seller or a combination of sellers over a commodity that no one else can bring it to the market. It consists in the exclusive power, right or privilege of selling a commodity.' According to the recent American case law exclusiveness is the real test.

Monopolies may be classed as natural, public, fiscal, social and artificial.

Natural Monopolies

Physical nature has limited the supply of land. Land exists in grades that vary in fertility, and desirability in situation. Though there is complete competition both in the ownership and cultivation of land, there is an element of monopoly in land rent. It is a gain due to the superiority of some land over others, whose cultivation does not afford even a pie beyond returns to labour and capital. These monopolies are natural because they are outside human control. They do sometime arise when the supply of raw materials is limited due to climatic or other conditions. In the production of jute India enjoys natural monopoly. Articles in

barbarous countries threatened with extinction do also enjoy a sort of monopoly.

Public Monopolies

When the business is owned and conducted by a public agency the monopoly is said to be public. It is designed to regulate consumption: to promote it where desirable, and restrict it when found to be harmful. Opium, ganja, alcoholic beverages and such others are subject to governmental regulation as otherwise they would inflict great harm on society. With special rights of note issue or special aids from Government, banks in many countries enjoy a sort of monopoly.

Fiscal Monopolies

Fiscal monopolies are a mode of raising money to feed public treasuries. Tobacco in France, sugar in Germany, salt and opium in India are monopolies undertaken by the states with a view to secure revenue.

Social Monopolies

The ordinary consumer is a poor judge of the quality of many articles. He attributes the value of a thing to the trade mark which in his experience stands for honesty. Trade marks, patents, and copy-rights are designed to secure to the inventor the fruits of his enterprise. The evils of granting such exclusive rights are recognized by every state. But the benefit derived being a sufficient off-set no Government seriously thinks of meddling with them. But when an invention or improvement is hit upon by two or more individuals at the same time, it is unjust that the first alone should enjoy the patent.

Under monopoly there can be no uniform price. It varies from time to time and from class to class. It is high where people are rich, and low where people are poor. It all depends upon the readiness with which people spend money. For the same stuff with different trade marks different prices

are charged from different customers. If the article monopolised is one of food, and if there is no easily available substitute, the monopolist would desire to let people feel hunger, as unsatisfied desires would give a high price.

Monopoly price is not always higher than competitive price. It is sometimes lower on account of the economics of monopolised production. There is no waste for advertisement as under free competition.

Evils

The monopolist knows by experience that his position is not unassailable. There is always the fear of substitutes and outside competition. If the price of the article is too high, the tendency is to go in for the 'next best or the just as good' at a cheaper rate. If wine is monopolised, and its price rises, whisky or some cheap liquor would take its place. The law of substitution is a sort of safety-valve to the consumer. If monopoly is to be complete, ownership over substitutes that cater to the same want is to be secured. Once monopoly is granted it is liable to abuse. The commodity in course of time ceases to be of the same quality as before, the patentee caring for his benefit.

Favouritism plays a part in the grant of monopolies, which are secured by a few favoured individuals or corporations. Monopoly leads to undue concentration of wealth in the hands of a few at the expense of society. It creates great inequalities in wealth, and gives rise to a sort of economic despotism, which is not conducive to general well-being. Economic despotism may be advantageous if the monopolist is a good man. But it is none-the-less galling on that account being what it is.

Remedies

So wherever possible private monopolies are to be done away with. In the case of those that cannot be, methods through taxation are adopted to place the monopolist on a footing of equality with those engaged in competitive concerns.

By a proper regulation of bequests and inheritances vast accumulations are sought to be broken and the surplus utilized for social and economic progress.

Combinations

Business like government is a slow evolution through ages. In a primitive society the producer and the consumer are virtually the same. With the advance of society wants become more varied, and necessitate specialization of effort. Business undertakings grow out of general economic conditions. They can be grouped under four general heads. individual business, partnership, corporation, and combination. Every business institution is related both with those that precede as well as those that succeed it.

Combination is a product of the present industrial development. Individual corporations often unite to form a combination under one central management. The object of it is to secure co-operation amongst different rival corporations of firms in a line in order to lessen the cost of production, to reduce the cost of administration, to avoid the 'cut-throat' competition, and to control the market. The capitalist hails it as a boon against the evils of the present system because of the terrible recognition he has had of unrestricted production, and free competition without any regard to demand. The Standard Oil Trust is the result of such a competition. Its success is a great incentive for the formation of the sugar, the whisky, the cotton, the oil and other trusts. The process is brought about either by lease or purchase of the property of the smaller corporations. Individual corporations do thus lose their individuality and become merged in a larger organization.

Except by failure or dissolution it does not die at all. The out-going or the in-coming of stock-holders does not affect it in any way. The title to property being vested in the trust it is not affected by the sale of any stock or the death of any stock-holder. Money can be invested in any enterprise without the need for the investor either

to attend to the details of business or take part in the management personally or be liable for the debts of the trust. It commands vast funds and resources, avoids the costliness of advertisement, and secures unity of control. It makes possible a higher degree of specialization. In the production of finished articles, and for the purchase of raw materials specialists can be engaged. There can be nothing like over-production or under-selling, waste or loss. Under free competition while prices of finished articles tend downwards, the cost of raw materials has a tendency upwards on account of demand from competing firms. The trust leads to monopolies of buyers, which hard hit the prime producer. A trust is akin to monopoly, and is sometimes called 'artificial monopoly'. It is the result of the move to avoid over-production, and under-selling. Once established it reigns supreme in the market. In borrowing capital at low rates, in purchasing raw materials, in bargaining with labour, and in the matter of marketing and sale it enjoys a good many advantages over isolated firms in competition.

Evils

The evil of it is that the advantages are all from the point of view of a class—the capitalist. It benefits a few individuals, and that at the expense of society. Vast fortunes are made by a few at the expense of starving millions leading to gross inequalities in wealth.

The evils of a monopolistic system are ripe with no less rigour. The producer of raw materials, the moneylender (investor) the wage-earner (labourer) and the consumer are at a serious disadvantage in the matter of bargaining, and in the economies secured by the industrial monopoly these have no share. Again, the strong firms have taken the place of small ones so as to effect a saving in capital and labour. The closing of these firms is to throw thousands of workers out of employment, and force them either to swell the ranks of the unemployed or to work in some industry where previously acquired skill is of no use. In fixing wages and the

hours of work, in imposing terms of employment, and conditions of life the trusts have come to acquire absolute power. The feelings of distrust and antagonism engendered amongst the working classes towards their employers on both sides of the Atlantic are in part due to trusts.

Personal business pride is a bar to an all-round combination. There are many persons who would rather remain at the head of their business than surrender to a trust. The tendency, however, is towards combination. The trust has in some cases outstripped geographical and national limits though the forms of national companies are not done away with. Trusts sometimes arise and develop beyond high tariff walls. The prominence they have assumed in the United States is in no small part due to protective walls.

Economic internationalism is a world force today. It is the precursor and moulder of political internationalism, the beginnings of which are laid down in a common public organization of rail roads, banking, telegraph, postal system etc. The Atlantic Shipping Trust, and the Electric Traction Business of America and Great Britain with common financial interests point the trend towards internationalism in the Trust Movement. World politics are today moulded by economic internationalism. But the cross-ownership and the intense feeling of nationalism are forces that run counter. Whether commercial internationalism leads to political internationalism and the growth of a general policy of peace in the world, or whether the counter-acting forces will gain the upper-hand, time will tell.



CHAPTER IV

PRODUCTION

MATTER can neither be created nor destroyed. Production does not mean creation of new matter. It is but the modification of existing matter so as to confer new utilities. Yarn woven into cloth, and cloth done into coats, shirts etc., to suit individual wants and tastes illustrate the utilities of form which man gives to matter.

Land, labour, and capital are the three factors essential for production. Organization, which is sometimes added as a fourth is implied in and is a result of labour. It cannot be treated as one separate from labour.

The word 'land' means and includes soil, mountains, forests, rivers, harbours, and mineral resources.

Labour' is the effort physical or intellectual undergone with a view to get compensation either in cash or kind.

The meaning of the word 'Capital' is the cause of endless trouble and confusion. The popular conception is that it is a fund describable in terms of money. The early economists defined it as consisting of instruments of production. The tools, the implements, and machines are all forms of wealth, which aid in producing things. Capital is wealth that does not satisfy a direct want, but gives an indirect satisfaction. Of two houses the one let out is wealth, while the other used for residential purposes is not.

Capital consists of instruments of production. They are concrete and material. Capital is to last long. Destroy any of it, you will suffer disaster. Preserve capital goods, you bring on yourself the same disaster. If industry is to be successful, capital is to last and capital goods are to be destroyed (consumed). If things remain for ever, there is no need for further production. What permanence is to the one, perishability is to the other. Again, capital must be able to replace

itself. Instruments or machines employed are to be kept intact with the profits realized from their use.

Localisation of Industry

It is due to the adaptability of a particular locality for the manufacture of goods. The expansion of the area of competition brought about a greater amount of local specialization. Temperate climate, mineral wealth, fertile soil, water supply, and labour efficiency influence localisation. Broadly put, the West of Europe and America may be said to have specialized in manufactures, while the backward countries are said to be subject to a corresponding specialisation in agriculture, and other extractive arts. With the establishment of the world market the industrial face on the globe has undergone a total transformation. The commercial nations of Europe own parts of Asia, Australia, South America and North and Central Africa. The enormous amounts of capital unable to find profitable investment being at home are utilized for opening the steam-ship, the railway and the telegraph in these lands. Labour which has no work at home, found ample employment abroad. Specialization once confined to the provincial or national markets now extends to the world at large.

Under the conditions of the world market specialisation has gone to a remarkable degree. Lancashire has specialised in cotton industry. Every process has its own localised area. Weaving and spinning are done in different districts. Spinning in its turn is further divided according to the qualities of yarn. In weaving intricate division of labour is perceptible, each distinct town specialising in some particular line of goods.

Benefits

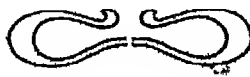
Localisation enables each locality to produce those things for which it is best fitted, and make large scale production possible. Up-to-date machinery can with great profit be employed. Proficiency and skill can easily be acquired, the workers being in the know of the ins and outs of a thing by close and constant application. The skilled workman knows

where a particular industry is, and where his services are required, and gets employment with little difficulty. The purchaser knows where he can get the thing he wants, and make a selection of his own.

Evils

Localisation leads to untold suffering and misery when there is depression of trade. Any thing that affects the industry affects a large population. Unemployment has become more common than employment. Poverty is becoming more wide-spread and acute. The chances of getting employment are now more uncertain than ever.

The ways of Nature are so varied, and wonderful that none can say that a particular part of the world is fit for this or that kind of industrial activity. Man's mode of living changes continually. New wants create new arts, and they in turn change the nature of things required, conferring value on new portions of the earth. In America the tendency for the industry is to migrate from the North to the South. Lancashire's hold on the world market is threatened by other lands, and in India Bombay is fast ceasing to be the premier centre of cotton industry. Many up-country centres are usurping its place. It is probably due to a growing sense of feeling that it is always better to secure a more geographical distribution of industry than to concentrate it at one place. Great risks are involved in utter dependence on centres like Lancashire, Bombay, Jamshedpur etc. Industrial depression, whenever occurs, can be faced with better chances of success when industries are diversified and diffused.



CHAPTER V

MACHINERY & MODERN INDUSTRY

THE development of science has revolutionised the industrial world. Knowledge of the secret working of Nature's laws gave men mastery over the forces of Nature undreamt of a century and a half ago. Wind, water, steam, electricity are to aid and serve man. Machinery has improved his productive ability. It performs much of the work which is quantitatively beyond the power of a large number of men working with simple tools. The steam hammer, for instance, concentrates on a given point a mass of force, which is beyond the physical capacity of a number of men put together. Even and accurate pressure, or the exact repetition of the same movement for a length of time are impossible by the unsteady human hand. In printing the superior certainty and regularity are unexcelled. Work too fine or delicate such as making of small balances is better done in no time with great exactness. The speed and economy of time of machinery in travelling and transport are quite unsurpassed. Man can never hope to cover thousands of miles either on foot or on cart in so short a time as on a car or a plane. Machinery has in short increased the size and volume of modern business, rendered large scale production, world trade, and competition inevitable with all the good and evil effects consequent thereon.

Machinery and Distribution of Wealth

Land, labour and capital are the three factors of production. The law of distribution assigns to each what each actually produces. Rent is the share of income that goes to the landlord, wage to the labourer, and profit to the capitalist. Competition tends to give the capitalist what capital creates, to the organizer what the business creates, and to the labourer

what labour creates. The comfort, the health, and well-being that a labourer enjoys and ensures to his children, depend on his earnings.

The remuneration that the different factors of production get depends on the contribution that each makes for the net output. A discovery or an improvement or an increase of any of the factors leads to greater production, and higher remuneration to each of them. Production does not increase in proportion to each successive additions of capital or labour, for here as well the unmistakable working of the Law of Diminishing Returns makes itself felt

But as is evident in different trades each of the factors does not get what it actually produces. If that is the case, there is no grievance at all. Where competition is the rule, there is a tendency for wages to rise, and for interest and profits to fall. But it all depends upon the comparative power and skill of the labourer in the matter of bargain and contract.

Machinery and Labour

The motive for introducing machinery is to save labour. A new machine either displaces an old one or undertakes an industry previously done with manual labour. It pays the labourer at a lower rate than under old conditions. That machinery tends to a diminution of employment, requires no positive proof. If there is no economy, there is no need for employing it at all.

It is often said that the ultimate effect of machinery is not to diminish the demand for labour. Labour-saving Machinery tends to lower the price of goods made, and this brings an increase in demand for the goods leading to a further expansion of industry and the absorption of the labour displaced. Cheapness promotes consumption, and production increases with consumption affording employment to a larger number of labourers than was the case when industry was in the hands of man. The demand for cotton cloth has increased a thousandfold after the machinery has

come into use. With the increased demand for fresh machinery for the enlarged production and for carrying and distributing the vast stocks produced labour required can never be the less under the new conditions than under the old. But where demand is inelastic, as in the case of necessities of life and cheapness does not stimulate demand consumers go in for new varieties of food, furniture, bicycles, pianoes etc, and the new concerns started to supply the new wants would absorb a good deal of labour turned out of employment in the bigger firms. If this is to be effected, there should be a general reduction of prices in most articles of ordinary consumption. It is only then that new channels of production would furnish employment to the displaced labour. But machinery as a rule is more prevalent in the manufacture of luxuries than necessities of life.

Production and consumption are no longer simple processes as of old. Things are no longer produced to meet a local or national demand, but the uncertain world market with competition on a scale unknown before. Fluctuations in prices leading to fluctuation in wages and irregularities of employment are a most common phenomenon. Scientific invention and progress are steady. An invention or an improvement of a machine does away with large bodies of labourers.

It is said that with the decrease in speculation, and increase in organization there would be greater stability of prices. But the reverse is the case. The proportion of workers producing luxuries is growing, while that of those producing necessities is on the wane. The demand for luxuries as we know is more irregular and less easy of commercial calculation than the demand for necessities. The effect of machinery is, therefore, to drive ever and ever larger number of workers from the less to the more unsteady employments.

Machinery has again relieved the excessive muscular strain, which a few generations ago was the common lot of more than half the working population of the world. It has displaced labour in employments which have taxed the

muscles, and driven it to industries, which are less monotonous and less taxing. It is becoming more and more automatic requiring less assistance from human hand. But the gain is more illusory than real. Workers are compelled to attend to more machines or work more regularly for longer hours with greater strain on the nerves. Machinery is an untiring monster; it needs no rest. Man is to attune to it, and a portion of Nature's rest is added to the working day.

It is sometimes argued that since the effect of machinery is to lower the cost of production, and price, what the labourer might have left as a producer he would more than make up as a consumer. A general reduction in the price of things consumed by the labourer would only compensate the loss he incurs. But if the article is one not consumed by him at all, or consumed in such small quantities as to be quite negligible, the reduction would not benefit him. As a rule machinery is applied in luxuries, which labourers as a class make a sparing use of.

Simple industries like pin and shoe-making now pass through fifty to sixty processes. The workman concentrates on a particular minute process. There is now too much of specialization which is neither wholesome nor beneficial. If it increases efficiency and output on one hand, it on the other narrows down workmen's opportunities to take to other employments in case the demand for the article either disappears or falls off. Again, it involves too much strain on the nerves, and too much exertion of one particular limb neither of which is conducive to good-health. It holds no encouragement to mental activity, but reduces the worker to animal level by choking the faculties to think and reason. It is urged that after all the worker cares more for the wages he gets, not for the joy and pleasure in the doing of a thing. This no doubt, is taking too mercenary a view of life, ignoring the human element altogether. The ultimate object is, no doubt, to get remuneration for work done. The person making an article instead of attending to a one fiftieth or one sixtieth fraction of it experiences the same sort of

elation and joy as an artist, a poet, a musician or mathematician feels over the fruit of his hard achievement.

Lastly, order, exactitude, persistence and conformity to un-bending law these are the lessons that machinery teaches. The short answer is that man is no machine, that variety is the essence of human life, that no experience, no thought of feeling is an exact copy of another, and that to conform to the movements of machine is to violate the very principle of life. By taking over work requiring precision of movement machinery reduces all workers to a common level of skill or un-skill. It has exhausted the physical energy of the worker, sapped his vitality, and lowered him in the scale of humanity by too much intensity of physical labour in a shortened time or by extending too long the hours of the working day over a part of Nature's rest.

Machinery and Overproduction

Improvements and inventions are the cause of over-production. They greatly aid to increase the output with less cost and in lesser time. Again, a change of taste or a change of fashion due to the vagaries of the consumer curtails the demand for a thing. The vastness of production and the uncertainty of demand involve risks never known before, and the business-man with all his shrewdness and experience is not able to anticipate demand with any degree of certainty so as to adjust the one to the other.

Free trade and competition have rendered markets co-extensive with the world leading to greater economic dependency of one country on another. Economic depression, whenever it occurs, is now no longer confined to this or that country, but extends to the whole world in all its varied and terrible forms. The economic balance has grown more subtle than ever. A slight disturbance in any part of a country disturbs all those that have trading connections and economically form one unit. The failure of the cotton crop in America affects the labourers working thousands of miles away in Lancashire and Manchester. The high demand

for raw cotton in the rapidly growing English mills made the American producer assume a harder attitude towards the slaves for the out put To compete with the English industry, the Dutch and German capitalist has to effect economies, and the worker pays for it with a lower wage and a longer working-day. In India again, it has whitened the plains with the bones of cottage weavers. In England it has led to the growth of a population thoughtless and extravagant, often drunk, with poor physique and poorer morale



CHAPTER VI

THE SALE OF LABOUR

THOUGH the term 'Commodity' is not applied, there is nothing more frequently bought and sold than labour. In its struggle with capital, labour is at a serious disadvantage. To begin with, labour has no means of holding back supply, and rapidly tends to glut. It is perishable, and cannot be reserved for the morrow. As a class labourers are poor everywhere. If they fail to work to-day, they cannot make the loss by turning twice the work to-morrow. Like the fruit and vegetable sellers they must on any day be prepared to sell their labour for any price for fear that it would otherwise perish. It is the perishability of labour that places its owner in an unequal position with the employer in the matter of bargain. The labourer cannot offer terms, but must meekly submit to those forced upon him with no option but to consent. A few weeks of unemployment would spell ruin to the labourer, but it will be a positive gain to the employer specially in times of over-production.

It is not easy to wipe the different rates prevailing in different trades. Men are not born equal. Some have great inborn gifts, others have mediocre abilities while still others have none at all. All those that have the requisite intelligence cannot come to the fore.

Choice of profession is difficult to obtain. A person might have a special liking for a calling. But when it comes to actual selection, the expenses of training or some such thing might stand in the way. The sons of labourers would naturally be content with the profession of their fathers.

There is one more thing which we can ill afford to take note of. It is the sentiment of men in general to live and die where their fathers had. To leave their hearths and homes, their kith and kin, and the locality they are habituated from

early childhood in order to secure a higher wage is unthinkable with many. Labour in other words is immobile. The result is that while some parts suffer from over abundance of labour, others do from a scarcity of it. So in one case wages dwindle to bare subsistence, while they have a tendency to indefinitely rise in the other.

The Life of Woe

The concentration of industry in the hands of a few capitalists destroyed the system of household, and family manufacturers and reduced the mass of human race to the position of labourers. Improved methods resulted in throwing large numbers out of employment. The power of production out-stripped man's power of consumption, and destroyed regular employment for a considerable class in every industry.

But as labourers form the bulk of population in all countries, and must necessarily be the largest body of purchasers, the very force that overfills the markets restricts the purchasing power of the majority. We are for industrial freedom, but, we have chaos, the spectacle of starving millions in the midst of over-flowing plenty as in America and Europe. Unless founded on sound economic basis, and wedded to moral law the policy of 'let alone' is no special blessing. Freedom is unreal, and means the right to starve and die.

'The existence of oppressed or underpaid labour concerns both the public conscience and public interest. It allows the bad employer to take undue advantage in securing labour power. It undermines the security of those working under better conditions. The Bulgarians, the Germans, and the Italians with a lower standard of living competed with the Frenchman in his industrial centres. When the Jap with his lower standard of life migrated to California, the American raised a great hue and cry at the 'yellow peril.'

But as ill-luck would have it he has to fight not an outsider—a Bulgarian, a German or a Jap—but his own kinswoman and children, who have become his rival competitors. Under the existing system labour with the lowest standard

of living is the fittest to prevail. In most of the industries woman has taken the place of man, for with the development of machinery the muscular strength of man became of no consequence. To set the machine in motion or to move it in the right direction or stop it at the proper time a little intelligence or a little judgment is all that is required. And for this a woman or a boy is as good as a man and to be preferred on account of the cheapness of labour. Again, a large proportion of women who seek employment do not need salaries to keep them alive. They can draw upon other sources, and what they seek is only a temporary aid until marriage or else a margin for extra comforts. Casual occupation, which is a curse in the case of man, is specially suitable to many women, who cannot shed their domestic duties altogether.

The supremacy of the manufacturer in our age is in no small part due to the merciless utilization of the cheap labour of women and children. Thousands of women eke out a low living by hard labour too trying to the physique. Ill-fed and ill-housed, with no parental control and drudging under insanitary and unwholesome conditions, what wonder that they grow to be mere moral and physical wrecks. Most of them, the unfortunate of the lot, are shut out from the world's inheritance of knowledge and culture. They know little, if at all, of God and religion. Love itself has become a saleable commodity like any other under the present commercial and competitive system. Sometimes the helpless woman has to part with virtue, health, and the hope of a good and noble life for a most ignoble life—all to escape from the miserable drudgery in a factory.



CHAPTER VII

THE REMEDIES AND THEIR EFFICACY

IN TENSE suffering made the workmen realize the supreme efficacy of self-reliance, self-help, and cooperation. To make their power felt they organized themselves into Unions. The influence of democracy cannot in this wise be over-emphasized. In most of the countries the mass of people are admitted to a share in political affairs for the first time. Universal education has followed universal suffrage. The advent of cheap literature, the news paper, the pamphlet, and the journal have brought all forms of knowledge within the reach of all. The extension of the railway, the cheap postage, the telegraphic and other communications offer better facilities for communication, and common organization. Those, who still hold that democracy consists of vote by ballot and that everything would go on as before, live in a paradise of their own. Compulsory Military service (conscription) on the continent has brought into existence national armies with sympathetic leanings towards the masses.

The wide currency of moral and spiritual principles have no less contributed to the improvement of the workmen. Through the strenuous labours of selfless preachers and powerful writers beliefs common to the materialistic mind that economics and industry have laws of their own, that business is directed by laws of supply and demand divorced from ethics or morality, that services of fellow-beings could be purchased like any other commodity at the cheapest rate with no regard for their body, mind and soul, with no serious consequences on society are doomed to fail.

Trade Unions

Perishable, and immobile by nature labour finds itself at a serious handicap in competitions with capitalism. The

capitalist makes his position unassailable by combining with rival firms in the line. The labourer has found out that the way to ameliorate his lot is to form into what are called Trade Unions in all branches of skilled labour. The un-skilled labourer possesses few trade unions for occasional ends with small fund and no permanent policy.

Trade Unions have become a characteristic feature of modern industrial life. The object is to control the supply of labour and therewith bargain for its price. The cardinal law of supply is that too much of a thing should not be put on the market, and that at too cheap a price for fear that there would be no demand for it at all. The power to reserve is what is wanted, and that can be done by the control of supply. The seller of the commodity, here the labourer, can, by a sort of monopoly, improve his position.

The strength of Trade Unions lies in their benefit fund. Without it they cannot exist and hold their own even for a few months. They are as much benefit societies as they are fighting organizations. They find out where there is need for labour, make provision against sickness, unemployment, strikes and old age. They maintain a press and issue pamphlets to educate the public and rouse their conscience.

These unions have a narrow out-look. Non-union men are not admitted into the fold. They want to control the sale of labour as effectively as a monopolist. They are opposed to every improvement as it results in throwing fresh numbers out of employment. They insist upon a uniform wage for all workers. Work according to ability, and pay according to need is a well-known dictum with them. The system of piece wages finds no favour with them because it enables the more efficient among them to turn out greater work and receive higher pay to the exclusion of the incapable and unenterprising.

What the uniform wage is it is difficult to determine. Different men are accustomed to different standards of living. A low general wage would reduce the standard of a great number. If it high would curtail employment, swell the

ranks of the unemployed, reduce capital, and evoke competition from persons with lower standard or drive capital to new lands where lower rates prevail. They are an impediment to real efficiency and progress.

Trade Unions have become a destructive force with no discipline. Strikes and threats of strikes are too common. They are no gain to the employer, the worker or the society in general. The resultant loss is greater than the actual gain. To avoid suffering and loss many schemes of arbitration have come into vogue.

The labourers have shed much of their early selfish outlook, and are extending their sympathy and support to their fellow-sufferers irrespective of caste, creed, or nationality wherever they be, West or East. Like the international trust, the Trade Union Movement is becoming a world organization with annual sessions at important centres to discuss matters of vital import concerning labour.

Socialism and State Ownership

The movement for the uplift of labour or socialism as it is called, is remarkable for its immense adaptability to persons of different temperament and nationality and different conditions. Wherever found it has local peculiarities of its own. The Christian Socialism of England under Kingsley and others differs in vital particulars from that on the continent. It insists on the necessity of moral and spiritual principles as the saving elements of society. The employment of children in factories is prohibited on social, biological and economic grounds. The hours of labour firstly of tender children, then of all minors, then of women, and finally of men were by gradual stages regulated by statute. Later protection was offered to life, limb and health. Dangerous machinery was fenced. Proper ventilation and sanitation were secured both in mines and factories. Relief was sought by legislation such as the Employer's Liability Act, the Workmen's Compensation laws and compulsory insurance against accident, illness, and old age, with premiums paid by the employer and the Government.

According to Marx it is but the inevitable outcome of the movement of modern society. On the ruins of the existing order the extreme school of socialists hope to build a healthy society by the federation of free associations.

Socialism, according to this school, is the industry of the people by the people and for the people. Freedom for the masses of mankind by sweeping away the old forms of abuse is its object. The state is to own, and manage every kind of industry, and to regulate the hours of work, and the quantum of wages. It is to take possession of all land, and to furnish the requisite capital thus eliminating the class of landlords and capitalists from the scheme of industrial life.

The abolition of the present capitalistic system, urge the socialists, puts an end to the numerous evils that go with it. The vast amounts spent for advertisements, which is a waste in a competitive society, can with no loss be dispensed with under the system of state industry.

Production to day is in anticipation of future demand. It takes a long time for an article to pass through several stages before it reaches the ultimate consumer. A war, a famine or a change of fashion may falsify the anticipations of the manufacturer. When there are competing firms each ignorant of the world market and of the production by the rest, there is always the probability of over-supply. Frequent trade crises, depressions, and bankruptcies are the results.

The present system, they say, engenders unnecessary duplication of businesses. The total amount of traffic between one locality and another remains the same though there may be two or more railway lines instead of one. It is the case with bus-plying, shop-keeping, oil-mongering, fruit-selling etc. Business does not increase because of the increase in number. Let the Government own all land, capital and organization, and there would be less waste, and more of economy. When the state undertakes industries, good quality is ensured because it needs no inferior stuff to lower cost. The comforts and conveniences of the labourer would better be looked to than under the present conditions.

Then arises the question as to what is the amount to be distributed, and the best and most equitable principle of such a distribution. Land is a free gift of Nature, and capital is the product of past saving, for which none need be paid. All profits, they say, must go to the labourer. But that both land and capital should go unrewarded is unjust and inequitable. In a socialistic state the incentive to save is throttled down. There would be no bait to scientific investigation, for all would equally share in the fruits of labour. With no newer and better forms of capital, production would be at a standstill. Man is selfish by nature, and cares more for private gain. When he is not to enjoy the fruits of his labour, why should he worry himself?

Then again the question of distributing the profits of production is not easily solvable. Some want to distribute according to the reasonable needs of each, while others hold that present needs are to be taken into account. What is 'reasonable need' is difficult to determine. It varies from person to person, from class to class, and from country to country depending as it does on the productive capacity and standard of comfort of each. Is there to be one uniform wage for all kinds of labour? Is the standard to be reduced to one common level? If wages are paid according to individual wants, why should one man work more than another? Idleness is inevitable. So 'sacrifice' is suggested as the determining test. This too is subject to one serious objection: can the work of an artist, a mason, a carpenter, a lawyer and a labourer be measured by one common standard? The one method that faces no objection is efficiency. Even in a socialistic society pay according to efficiency is the rule that approximates to reason and justice.

It is said that a person is now at liberty to choose his profession. Under socialism there is no room for choice at all. As a matter of fact it is a lucky few that rise above the rank of their forefathers. The majority follow the occupation of their class. Freedom of choice in reality there is none. In the case of the working masses it is nominal, and delusive.

The only choice is to work under hard conditions or to remain idle and unemployed. The so called freedom means the loss of real manhood, and all that is good and fine in human nature. It means the struggle of all and the success of a few.

In a socialistic society there would be no profits and rents. The capitalist and the landlord lose the right to exploit the masses, and amass at the expense of society. There would be no private fortunes for selfish ends. Parasitism, luxury, extravagance, vice, and ruin that follow their wake have no scope to flourish. But the system reduces society to a dull uniformity. It chills enthusiasm, and roots up self interest, the motive for accumulation. It has no place for men of genius. The incentive to work and improve is lost. Why should any one work and worry about when he is to participate along with others the fruits of his labour? Today industry exists, and society progresses because of the existence of exclusive ownership. Society would either go forwards or recede backwards but remain at a stand still never. Capital is the economic basis of progress. It is the result of sacrifices of successive generations in years gone-by. Socialism is hostile to accumulation of capital, and undermines its very foundation. It would be a matter of sore disappointment to all those that believe that the existing capital and knowledge would remain unimpaired.

In a socialistic state the fears of Malthus might come true. Population might increase with no corresponding increase in efficiency, and force down the standard of life. In the industrial West late marriages, and self restraint are a salutary check on the growth of population. With the increase in number the chances of education, and personal comfort would become fewer. If the Government takes on itself the parental responsibility of feeding, clothing, and educating children, early marriages might become the rule, and men might propagate the species with no thought for the future and no anxiety for the present. Population would then out-strip the means of subsistence. The state would be called upon to regulate domestic life, and the relations between the sexes. It is a course obnoxious

and unwholesome, and with no parallel in the pages of history. The choice is one of extreme difficulty—over-population or the loss of domestic happiness, neither of which is desirable. State control in short revives the old despotism in a worse form in as much as men's means of subsistence and marital relations would be subject to Government control. The aim of socialism is to secure economic freedom, and to promote a free and happy social development. And what have we in the result? The little freedom in matters of pure private concern would be gone, and men would be subject to a most prying scrutiny and annoying control.

Freedom is the parent of progress. It is only when man breathes the free air of freedom that intellect, genius, ambition, human personality, and all that is fine and noble in man do develop and flourish. The right to select and decide as to the fitness of a person to investigate or improve lies with the Government officers, who generally lack the capacity to hit upon the right sort of men, and even if they have, the will to select may be lacking.

There is no guarding against idleness. Fear of discharge, dismissal or jail there is none, for whether he works or no, whether he is free or confined, his food and clothing are assured. It is but poor consolation to the state, that labourers are strong, hale and hearty, eat well and sleep well when they do little work with little or no out-turn. Better far would it be to extract some work than to maintain them in prison. In the result production dwindles, and poverty increases. The right to distribute rewards being with Government officers, favouritism, patronage, corruption inevitably creep in. Where Government officers are perfect this system has a fair chance of success. They can be perfect only when society is perfect, and if society is perfect, there is no need for socialism.

As with industry so with land, the extreme wing of socialists is for doing away with the class of landlords, the state as sole owner receiving all income, and distributing it according to some equitable principle. Landlordism, say they, originated in conquest. It is but the assertion of might over

right, of the strong over the weak. There would, however, be private property in wealth devoted to consumption and enjoyment, but all grades and distinctions of classes based on wealth should be wiped out. All persons, whatever class they belong to, and no matter what their position and profession in life be, are to be equally rich and equally poor. A most democratic ideal, no doubt, but impracticable and fraught with mischief. It is opposed to divine dispensation. God never intended all to be equal. In birth, training, physical, mental or moral qualities men are not all equal. Inequalities swept out would soon recommence and old evils revive with redoubled vigour.

Much has been saved in different countries and at different periods ever since the world began because of the guarantee that a person could utilize his savings the way he liked best, and his own kith and kin would participate in its enjoyment after him. In the absence of the law of inheritance the incentive to save would be gone. To break up the accumulation of land, in the hands of a few persons, death duties and inheritance taxes are collected, the money increasing in scale and amount within the degree and distance of the inheritor to the property. More of this when we deal with 'rent element' in the next chapter.

How this acts and reacts on the state remains to see. The administration of justice, the maintenance of peace and order are the minimum functions which every state is to discharge. With the progress of democracy, and the growth of state and municipal socialism the Government is called upon to attend to a good many duties, which have hitherto been within the domain of private individuals. If in addition to the telegraph, the tram, the lighting and water supply the state is to undertake industries, even the strongest state would stagger and fall under its dead weight. Until that happy day when universal peace becomes an accomplished fact heavy expenditure is to be incurred for the up-keep of large armies and navies. When industries are state-owned, and state-managed, it would lead to conflict of interests. The state would like

to get as much as possible for the costly administrative and military purposes while the people insist upon a general lowering of prices. If the Government wants to maintain its stability and repute, it has no alternative but to yield.

The Russian Model

The aims and objects of socialism are well in their way, and there is nothing to find fault with. But is it practicable and in the wide interests of a nation? Why not, some may say. Does not Russia to-day offer us a model? The attention of the world is being rivetted to the progress she makes by one of the boldest experiments that has ever been made in history. Her economic and social fabric differs widely from the rest of the industrial world. The economic development of Russia has been retarded to our day for political and other reasons. Socialism need not encounter any serious opposition from the capitalist class, for there is no such class worth the name. There is no gulf between class and class to be bridged over, no vested interests to oppose, and no necessity to sweep off the existing order of things. The country is vast and sparsely populated. Land is in plenty, and extensive cultivation with rotation of crops was till very recently the rule.

The conditions favouring the nationalist government embarked on colossal schemes of public utility at enormous cost to the Exchequer. The old land of the Czars is now in the process of a great transformation. At an enormous expense the Danube has been harnessed for man's use. The Hydro-electric scheme on that river is one of the greatest experiments of the day. Besides producing vast quantities of pig iron, special steels, aluminium and other alloys, the industrial combine is intended to irrigate thousands of acres of dry lands of the steppes. Another scheme for the Volga is on foot. By the Five-Year-Plan Russia hopes to bring in a new millenium, a new era of prosperity and power, to her sons and daughters.

Whether it would be a signal success or a dismal failure it is not for us to say. Under the world economic conditions,

however, with prohibitions and tariffs in every country and up-to-date methods of production everywhere the realization of the scheme is hard of achievement. But with Russia and India industrialized with their vast resources and man power, production would go up by leaps and bounds, and trade depressions would be an ever-recurring factor. But in any case one thing is certain. The state is for the people. If it thinks that the experiment does not bring in the long-hoped-millennium, it would not in the least hesitate to do away with it and seek another. The spirit pervading Russia—the spirit of cooperation, and collective improvement is what we should strive at—not the methods followed. The caste and joint family systems as well as our cultural background are against the introduction of Russian methods, and the feeling of aversion to state entering on industries, and regulating domestic life is too strong with us.



PART II

AGRICULTURE

CHAPTER I

LAND AND RENT

FROM the dirt and din of the industrial centres into fields fresh and pastures green, from the dark gloom into rich sunlight, what a contrast and what a great relief! Of the size of Europe excluding Russia, of course, with rich extensive plains, with a fine and varied climate, and watered by the Ganges, the Brahmaputra, the Godavary, the Krishna, and the Kaveri, to mention a few rivers, lies the great Indian Sub-Continent. With lavish gifts of rich land, rainfall and sunshine, Nature herself may be said to have intended her to be essentially an agricultural country. Well may we recall the famous lines of an English writer that "whoever could make two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country than the whole race of politicians put together."

Vast as it is, the extent of land, and especially of a particular quality is limited in India as elsewhere. Unlike the other factors of production—labour and capital—land cannot be increased or decreased at man's will. Hence the truism that land has no supply price. With a rise in demand the supply of a particular kind of land cannot be increased. The absence of industries and the growth of population have increased the pressure on land. The result is that land has come to acquire a quasi-monopolistic position and its value and price have increased. An acre of land, which could be had for, say Rs. 100/- some thirty years back has gone thrice or four times its former price.

For the production of crops fertile land, favourable climate, seasonal rainfall and other facilities are essential. When the soil is inherently poor, capital and labour expended would be unavailing.

Next to richness the value of land depends upon its situation. Nearness to market facilitates easy exports, while lands a long way off are at a serious disadvantage. In the one case things can be had more cheaply, and may attract more customers than in the other as higher prices have to be charged to cover the incidental costs of marketing. The opening of roads, railways, and water-ways will no doubt minimize the difficulties in a way, but cannot altogether obviate them.

But land of every kind, good as well as bad, is cultivated because of the limited extent of fertile land everywhere. The yield of rich lands alone is not sufficient to meet the growing wants of man with the consequence that lands of inferior quality as well are to be brought under the plough. This is more in evidence in old countries where the pressure on the means of subsistence is greater than in new lands like America, where land till of late could be had for mere asking. The inscrutable working of the Law of Diminishing Returns works in the same direction resulting in the cultivation of all grades of land,

Large Scale Farming

The first business proposition that faces the farm is the determination of the size of the farm that is most profitable. In the United States large scale farming is the rule. It is found to be more profitable to farm a large extent of new soil than to carry on intensive cultivation on a small plot of land. Where the one crop system obtains, and large farm is the rule the size of the farm is more important than either the quality of the soil or the manner of cultivation. Even in America the tendency is to divide the large farms into smaller holdings and carry on intensive cultivation. The loss of slave labour, the pressure of population, and the growing appreciation of closer cultivation have tended to reduce the size of the farms. Greater attention is now paid to the selection of soils for special lines of farming and larger interest in scientific cultivation is being evinced.

Persons imbued with ideas of capitalistic production want that agriculture should form no exception, and that large

scale farming should be introduced in order that output may enormously increase. For obvious reasons agriculture does not admit of industrialization. In the first place, agriculture is not subject to human control as industry is. The manufacturer can increase the labour force and the capital out-lay without out-stripping the due limits of organization and management. In agriculture, land assumes an important position quite out of proportion to the other factors of production. The play of Nature is unrestricted. The caprice of monsoons, the unfavourable state of the weather, the sudden appearance of a pest are still impediments in the way of successful farming. Besides, where land is scarce, and where there is too much pressure of population as in India, extensive cultivation is beside the point. It is only where land is in plenty, and population is sparse, and one crop system is the rule that there can be any approach to extensive cultivation and large scale farming. Add to this, the labour equipment, the talent for management, and the money required for the employment of scientific methods, and the kind of crops to be raised are some more factors, which we cannot fail to take note of.

Farm organization is in its nature very simple, and is not susceptible of indefinite expansion. As in the case of a factory it cannot be made complex and extensive by investing large capital and thousands of men. With the increase in the size of a farm, efficiency of management is impaired, close supervision, which is necessary where large bodies of men are employed, is out of question. Again, in the selection of a farm richness of soil and nearness to market are the controlling considerations.

No other industry requires so much money and none is so deficient as agriculture. The implements of husbandry, the live-stock, the manures and other things involve no small amount. But farmers as a rule are poor in every country, and more so in lands like India and China. They find it hard to make large investments for expensive equipment. Even when they have the requisite funds, it is neither prudent nor profitable as they can find use for the machine for a short time in a

particular season of the year. During the rest of the year it is to remain rusting.

Fragmentation

The question that next confronts us is whether there is a lower limit to the size of a farm. The steady increase in population and the want of other industrial pursuits have led to over-crowding of agriculture in our land with the consequence that there is a growing diminution in the size of individual holdings. In most cases farms are not worth the name. They are not of a size sufficient to support even a family.

By the Law of Partition, holdings, plots, groves, trees are divided amongst the members of the family. In the case of wells, ponds and other things that do not admit of a partition each is entitled to enjoy for a time by turns. In some places "fragmentation" of lands is carried to ridiculous lengths. The lands partitioned are mere toy holdings, which make agriculture inefficient and unprofitable. The poor farmer finds it most difficult to maintain cattle in sufficient numbers, and lending animals for ploughing and carting purposes is becoming wide-spread. In some cases the fragments are so small that he is forced to use the spade being unable to maintain a pair of plough oxen. During the busy part of the year at the time of transplantation and harvest due to a lack of capital and a sufficient labour force it is not uncommon for members of one family to work on the lands of their friends and relatives not for wages, but for similar services rendered or to be rendered.

Add to the Law of Partition. The custom of gifting small bits of land to daughters or Brahmins at religious and other ceremonial occasions has worked in the direction of fragmentation. On the redemption of mortgage debts mortgagors get small scattered bits. Statistics for 1921 reveal that the average extent of land per head in Bombay is acres 12'2, in the Punjab 9'2, Central Provinces 8'5, Burma 5'6, Madras 4'9, Bengal 3'1, Bihar and Orissa 3'1, Assam 3 and in the United Provinces 2'5. Most of these owners are absentee land-lords living by holding an appointment or carrying on trade in some town or other.

The agricultural commission opines that fragmentation is to be checked if matters are to improve. To keep it under check two courses are open: Legislative enactment and co-operative action. The former has been tried in France, Belgium, Germany, Denmark and Japan. In entire disagreement with Indian conditions and social customs, it is not popular with the people. But should individual and national prosperity be sacrificed for a sentiment or a custom ?

It is said that both in Bombay and the Punjab, where matters were sought to be improved by statutory law, the experiment proved infructuous. The failure is due to the ignorance of the people of the benefit which the law is intended to confer. Education of the sound working of economic laws on co-operative lines may do a lot in this wise. In the short span of five years the movement has gained in volume and strength. About 3,140 villagers availed themselves of it. 1,33,000 strips were transformed into 25,300 plots with an average of 70 cents. Exchange of lands has become familiar and contiguous plots are secured. Boundry disputes too common when small bits are owned by different persons are avoided, and there is less waste on account of paths, cart tracks and bunds. If this sorry state of things is to continue, the yield of land will abnormally fall. The minimum holding dry and wet must at least be 4 acres in order to be paying

Rent

The popular idea of 'rent' differs from the classical. In every day life an instrument of production may become a rent-earner. The term 'rent' refers to the earnings of many things to which land is not attached in the letting. A person may 'rent' a house, a car, a tool or a thing. But science, however, confines the term to the product of land. Rent is what a tenant pays to the landlord for the use of the 'original and indestructible properties of the soil'. 'The rent of a piece of land' says the definition, 'is what it produces minus the product of the poorest land in use that is tilled or otherwise utilized by the application of the same amount of labour and capital.'

Land is once for all limited in quantity, and greatly varies in quality. When there is land in abundance, no particular unit is of any value like air and water under normal conditions. There would then be competition among landlords. Production would be due to the application of labour and capital, land having no specific value at all.

The increase of population necessitates intensive working of cultivated lands and the reclamation of inferior tracts as well. For it is not always profitable to cultivate fertile lands only to the exclusion of the inferior sorts on account of the Law of Diminishing Returns.

What that law is it is well to say a word here. The law of diminishing returns is said to apply to agriculture and other extractive industries in the manner in which the law of increasing returns applies to manufacture. With every increase in labour and capital there is a corresponding increase in the volume of goods made. It is because the three factors of production are under the control of man, and can either be decreased or increased at his will, making large-scale production possible. Land being limited in extent and not subject to man's control, additional increments of labour and capital are not accompanied by an increase in production proportionate to the successive investments made. If an investment of Rs. 100/- fetches one garce of paddy, we cannot by investing another hundred on the same land get another garce. The increase would be something less, say, three fourths of a garce. A third hundred invested increases production by one fourth or even less. A wise distribution over different lands secures greater returns than large investments made on the same plot. This accounts for the cultivation of rich and poor soils as well. It must not, however, be supposed that manufactures are not subject to the Law of Diminishing Returns and that agriculture has nothing to do with the Law of Increasing Returns. They are there, but slow in their operation almost imperceptible till a point is reached. But the development of scientific methods has by an increase in agricultural output checked to a great extent the operation of the law. The discovery of new lands

and the import of food stuffs largely relieve the pressure on lands in over-populated countries and minimize the effect of the law.

It is the marginal farm cultivated under the severest disabilities that determines rent. Marginal productivity is the difference between the lands of the highest grade and the poorest soil under cultivation. It, in other words, is the loss incurred by non-cultivation of the last unit. If for any reason rent is less, competition amongst farmers pushes it till it covers the whole of the marginal productivity. Rent is, therefore, the difference between what a certain amount of capital and labour produces on a particular land and the marginal farm. It is due to the productivity of the soil.

It is current belief that 'rent is not an element in value'. It is the cost of production that determines the supply of a thing. But production is not capable of indefinite expansion. There is a limit to the sacrifice, to the amount of labour and capital that a person can call in his aid for production.

'Is rent an element in price' is the question. The classical statement on the subject is that it is not. According to that school rent pays no part in the adjustment of values, and that things exchange for value in exactly the same ratio even if there were no such thing as rent. Even granting that a part of the supply of wheat comes from no-rent land, the cost of wheat of this as well as of other farms does equal and express the normal price of the cereal. If the proprietor of the superior land were to say, 'I will take no rent for it' it would not make wheat any the cheaper for it.

To carry it further—suppose farmers say "We will not keep the rent, but pass it on to our labourers". This does not make wheat cheaper. The labourers again in a generous mood may relinquish the gain in favour of the public. In all these cases rent exists, and whether absorbed by the landlord, the farmer, the labourer or the public maintains price constant.

Rent is not peculiar to land. In a broad sense it exists in all industries and trades and is independent of man's efforts. It is the surplus often known as the "unearned income" because it is not due to any effort or sacrifice on his part. A

mine is as rich after a sum is paid to the owner as before. The payment does not add a whit to its riches. An element of rent always exists in all trades and professions. The doctor and the lawyer demand different fees from different individuals according to their capacity to pay for similar services.

It is the case with money. The same amount of capital fetches different rates of interest unless free competition prevails, and capital freely flows from industry to industry. Suppose even here the capitalist refuses interest, the price of a thing is not affected. It makes no difference whether interest is pocketed by the capitalist or the interpreneur or passed on to the workman or the purchaser of goods by way of discount.

The principle likewise holds good in the case of labour and wages. Even if the labourer works for nothing, still the price conforms to the marginal utility and in any case wages exist even though wage-earners do not get and prices remain the same.

The question of rent does not arise when the owner is himself the cultivator. He owns land and contributes the necessary labour and capital. Landlord and tenant in one he needs not pay rent to any other. Where farming is done by the renting or leasing system, it is otherwise. It sets at naught the essential feature of good farming. The landlord makes it a point to extract as much as possible in the shape of rent with little regard for the permanent fertility of the soil. It is not otherwise with the cultivating tenant, who at the most has a temporary interest in the soil. It leads to undue exhaustion of the soil. For a number of reasons the practice of taking rent in kind is getting obsolete in our land. The raising of commercial crops such as tea, jute, groundnut for foreign market brought cash renting more into vogue. The amount of rent is fixed in a lump sum according to the extent, productivity and competition. Under the cropping system a share of all or some of the staple crops raised is delivered to the land-owner according to the usage current in the locality. The variety of crops raised and the absence of land-lords in far-off places have rendered cash-rents more convenient and

popular. In the Zemindari tracts it is optional with the tenant to pay rent in kind or commute it into money payment.

The system of renting is looked upon as an evil. The lack of supervision on the part of landlords and the absence of the incentive to maintain the permanent fertility of the land is disastrous in the extreme. The farmer extracts from the land as much as possible without returning anything to sustain the fertility. The danger is all the greater when there is free-trade. The sole consideration guiding him is to make as much as possible from the soil and market it. This kind of farming has degenerated into what is aptly called 'mine farming'.

During the last thirty years the rent of agricultural lands in India has gone by leaps and bounds. It has increased three to four hundred per cent. or even more. The increase is in no small part due to the workings of free trade, the establishment of easy means of communication, the disappearance of other industries, the increase in population and the general rise in prices.

Rent as we have seen is an 'unearned income' due to the productivity of the land, and not to the efforts of any one. Why should a few fortunate individuals pocket the income of land at the expense of society for no sacrifice of their own? What is the justification moral or otherwise for such a state of things? Herein lies the source and strength of socialism, which wants to do away with the class of landlords. The estates they own are the reward for their past services and prowess in war. A wealthy and leisured class, they have done much to further the cause of learning and public good. This apart, there is something essentially unsound about the basis of the argument itself. As seen already 'rent element' is not peculiar to land. It exists in the profit, the interest, the wage and the fee that the manufacturer, the capitalist, the labourer and the doctor respectively receive. On the basis of this very argument what reasonable plea can be put forth in defence of any of these?



CHAPTER II

THE PROBLEM OF POPULATION AND THE SUPPLY AND EFFICIENCY OF LABOUR

IN discussing the industrial labour in the West we have avoided all considerations of the problem as having no practical bearing on modern European life. It is a live issue with us. On the platform and in the Press the subject is being discussed at length, and has evoked diverse criticism. The starting point of all modern speculation dates with the essay on population by Malthus published about 1795. He says that the facts of human life in every country show that man is prolific by nature, that the increase would be rapid and continuous but for the check imposed by the dearth of food or some restrictive force such as famine, pestilence, infanticide, war or voluntary restraint. He argues that while population increases by geometrical progression and doubles itself in every twenty-five years, the supply of food stuffs increases in arithmetical progression. He then infers that what had been in the past was likely to be in future, and that population would be checked by famine or some other cause unless voluntary restraint was called in aid to arrest the growth. So his suggestion was that people should abstain from early marriages, and exercise voluntary self-restraint even in wedlock leading lives of moral purity. His views gained in strength and popularity in every advanced state. Those who held his views advocated anti-conceptional devices without fear in the face of popular opposition and contumely.

The problem interests us because the supply of labour depends on population. The larger the population, the greater the supply of labour, the smaller the population, the lower the supply. Whatever affects the one affects the other. It is well to know what contributes to the growth of population, and how it affects the productive efficiency, the individual income, the standard of living, the national wealth and so on.

Increase in population is due to excess of births over deaths. If the population in a village is 1000, and there are 40 births in every year, the number at the beginning of the next is 1040. But before we can speak of the real increase the number of deaths during the year is to be deducted.

Birth rate depends on the natural age of marriage and the willingness of married couple to bring forth children. The natural age of marriage differs from class to class, and from country to country. In warm climates where child-bearing begins early, it ends early. In colder climates it begins late and ends late. But in every case the longer marriages are postponed beyond the age natural to the country the lower is the birth rate, the age of the wife being, of course, more important than that of the husband.

In the advanced states whether people marry early or late depends upon the standard of comfort they are accustomed to. The standard of living is different with different classes. In the middle class a man's income rarely reaches the maximum before he is forty and the expense of bringing up children lasts long and is heavy. But the artisan earns at twenty as much as he ever does unless he rises to a responsible post. His children are not of help to him till fifteen unless he chooses to send them to a factory. At eighteen the labourer earns full wages, while his children cease to be a drag on him from their early childhood with the result that the average age of marriage is high among the Middle classes, low among artisans, and lower still among the unskilled labourers. Birth rate among the lower class is, therefore, higher than among the Middle classes. France, however, is the classical example of a country with a stationary population. It is because the standard of living of the Frenchman is higher than that of any European. He has his bath and drawing-rooms, his servants and cars, his theatre and cinema besides a large variety of other things to cater to his convenience.

Statistics go to show that birth rate is lower among the rich than among the poor who have no mind to make provision for themselves and their children, and who live an active

life. Next to food sexual appetite is the principal desire with the lower classes. With the growth of prosperity and the advance of civilisation, birth rate tends to diminish. The rise of a multitude of new wants diminishes the intensity of sexual desire. The man or woman who is immersed in art, literature, science, politics or religion is not swayed by the low animal pleasures of the body in the way and to the extent of those who are not. In one case self-restraint is a virtual necessity, for a large family hampers advancement in body, estate and soul.

Again birth rate is lower in democratic countries. Democracy connotes freedom—freedom to the individual to think and act and live as and when and where he or she pleases. The movement for the rights of women, which is an aspect of modern democracy tends to minimise the importance of natural functions of women as wives and mothers. They have new pursuits to follow and functions to attend to. In every walk of life the American women lead their sisters outside. In the field of medicine, art, and literature they hold a high place. In politics they prove to be the nearest and dearest rivals of their manfolk. England, France, Germany, Italy and Japan do not far lag. Even in the *purdah*-ridden Turkey and Egypt woman has thrown off her veil, and come to the fore to face the stern realities of life. Marriage bangs the door against these things, and woman can seldom hope to realize them unless she chooses to remain a virgin or marry late and shed most of her domestic duties as wife and mother.

Migration is another factor that affect labour supply. It may be due to political ambition as in ancient Greece or the religious persecution as in the seventeenth and eighteenth century Europe. Political and religious freedom being assured everywhere, greed of gain is the prime mover of migration today.

Turning to Malthus and his school of thinkers, it is to be said that man is not so prolific as to cause a rapid growth of population. The trend is the other way. The fear in the

advanced states is that population will steadily decline, hence they have taken the regulation of marriage laws and imposed fines and penalties for non-marriage. France is the historical example of a country where population is stationary. In 1831 there was an increase of 4 per cent. It dwindled to 3 per cent. by 1896 and to 2'2 by 1931. The state discourages perpetual virginity by imposing fines on women who choose to remain unmarried after 30. By offering presents and pensions to parents it seeks to encourage people to marry and beget children. Societies are started to secure free medical and legal services for parents with more than three children.

The difficulty regarding the supply of food is not insurmountable. The discovery of new lands has opened new avenues for surplus population. Scientific methods have increased agricultural output 20 to 30 times more than before. If population grows on one side and scientific improvements on the other, there is no fear of dearth of food.

The laws of variety, limitation and substitution suggest the satisfaction of an increasing number of wants with greater ease; for, though nature provides us with only a limited quantity of a particular kind, the growing number of new wants can be satisfied with newly developed substitutes. Though the need for food cannot be replaced by another want, the need for one kind of food can be replaced by another. If men are to live on meat alone, there would sooner or later be not enough of it. But as they are acquiring the habit of taking in its stead a variety of other foods, and new varieties are constantly invented, there is no reason to think that we will soon reach the limit of food supply.

The Efficiency of Labour

A well-established standard of living influences the determination of wages. It causes workmen to stick to a demand, and thereby enables them to get what they want. It only expresses a half truth but not the whole of it. A labourer cannot get a high wage simply because he is accustomed to a particular standard. The income he derives is coequal

to the efficiency of his labour. Health, physical strength, ambition, energy, education and technical knowledge are the principal qualities that determine the productive efficiency of labour. In a country like India where work is done mostly by hand the importance of bodily vigour and physical strength cannot be over-estimated. These are greatly influenced by climate, race characteristics, adequate food, and habits of life. Intemperate habits and inadequacy of food lower vigour and increase mortality. Decent clothing and sanitary house accommodation are no less important. For healthy development rest there should be both to the mind and the body. The want of these lowers vitality and causes worry and excessive mental strain. The kind of work, the hours of labour, personal freedom, and cheerful life and the hope of a better prospect are some more factors which we cannot ignore.

Technical knowledge depends largely on education and herein lies the justification for maintaining technical schools and colleges in every modern state. The lack of these facilities makes the Indian labourer, the illiterate, feeble and unskilled being that he is.

Applied to Eastern countries such phrases as the "age of marriage" and "birth control" have little meaning. Marriage is a matter of social and religious regulation. Religion enjoins and society compels. Man has the option either to marry or not to marry though the *Shastras* hold married life laudable. It is one of the sixteen *Samskarams* that he is to go through. In the case of woman there is no option at all. It is the one *Samskaram* in her case, and she is to be married whether she wills or no. The aim and end of life with the ordinary man is to marry and beget children. The greater the number, the more fortunate he is considered to be, whereas in the West the addition of a new child means a fresh misfortune. Polygamy is still current in our country whereas under Christian Law a man cannot have more than one wife at a time. He should not marry another before divorcing the one he has, though the rigour of the law is softened after the war on account of the loss of large number of men in the prime of life in every European

State. The idea of late marriage does not occur to us. Celibacy is out of question and birth control is most obnoxious.

The East offers the maximum birth rate in the world, which is 45 per thousand, the West offers the minimum birth rate which is 15. As our birth rate is high, so our death rate. Malnutrition, the unfitness of girl-mothers to tend the new-born babes and the want of proper medical assistance result in enormous death rate in our land. The death rate of infants per thousand in our towns is 419 whereas London rate is 70. Due to want of good food and good living the average age of an Indian has come down to 23 according to some estimates and 21 according to others, while that of Englishman is differently put at 55 and 45.

Our death rate is appalling. The number of persons that fell a prey to famine, plague and cholera during the last two hundred years far exceeds the number of war casualties in Europe during the same period. Malaria alone carries every year a greater number than the one that fell in the Great War. Famines are recurring at shorter intervals. Cholera, malaria and other diseases have permanently settled in the land, and power to resist disease is fast sinking. Poverty and misery are eating into the vitals of the nation. The only staple industry in the land is agriculture, but it is uncertain and precarious. Being old and too much exploited, the land is showing signs of exhaustion. The methods of production are primitive and unenlightened. There are few trades and industries to solve the bread problem. The establishment of factories in Bombay, Ahmedabad, Sholapur and other industrial centres is bringing into prominence the question of unemployment. Strikes and threats of strikes are becoming common. As in the industrial West the evils and horrors of industrialisation are making themselves felt. Emigration to foreign lands is the only course open to relieve the pressure of population.

Facts do not support the charge often made that Indian labour is immobile and the Indian wants to live and die where his forefathers have before. The flow of population to Africa

Kenya, Malay Archipelago, Assam, Burma disprove the charge. But emigration in our case is neither easy nor desirable. The way is strewn with obstacles. The colour prejudice is acute. In the advanced states, which offer good facilities for expansion, we are unwelcome. The white-man dreads the black lest with his low standard he should beat him in the race of competition. Against any such contingency he secures his position by statutory prohibitions. In countries like Africa where no such bar exists, the lot of the Indian is hard to bear. He labours under most severe disabilities. He is no better than a slave, though he is not so called, with no economic independence, no social status and no political rights.

Though the birth rate is high, the general increase in population is not much higher than in England during the two census prior to 1931. The reason is that, though the actual number of children born is quite small, the death rate is negligible when compared with the horrible figures in our land. The prosperity of the English, their standard of living and the system of a well regulated dietary have given them greater power of resistance to disease, and Science has enabled them to reduce death and disease to the minimum.

The latest census of 1931 has revealed an increase of 108 per cent. It has given rise to pessimistic prophesies as to the economic future of the country. The land is threatened with a permanent poverty of the worst sort. In some rural areas over 1000 persons per square mile are to be found. It is a high record of rural density in the world. As a consequence lands are being split up and holdings are becoming uneconomic and unprofitable. Land is deteriorating and production dwindling. This apart there is too much pressure of accommodation of home steads and cottages in many villages. They are become mere hovels, insanitary and congested. The inmates have to sleep along side of cattle and live-stock. Home steads are huddled together with no attention to drainage and ventilation and open to the risks of frequent fires. The problem of rural housing has not attracted the attention it deserves.

The one course open under the circumstances is to restrict the number of births. How, and by what means is the question.

Biology tells us that man is no longer a sexual animal unable to exercise voluntary control over the natural urge. He is not seasonably sexual like birds and quadrupeds which often fight to death for the capture of selected mates. Partly by *environment*, and partly by *immersion in self-created* economic and other troubles man is able to establish voluntary self-control over his sexual appetite. He has to a large extent subdued and repressed the sexual impulses and cravings. It is not unreasonable to think that he will be able to bring the sexual appetite well within control as he has the rest.

It may be said that the vast majority of youths and maids are subject to natural urges, but before the overwhelming evidence that these are subordinated to the will such arguments do not hold water. Every-day experience convinces that the desire is diverted by accidental intervention or deliberate exercise of will even in the case of the most sexually excitable. Napoleon Bonaparte was so absorbed in his political ambitions that he completely forgot the Countess Walewaska and ignored the sexual side of his relations with her. His attachment to her was due to the political and social influence she was able to wield in Poland, rather than gratification of his carnal desires. Such persons are few and far between. But what of the common run?

To satisfy the animal craving without the evil that follows the desire of the modern man. The result is that a number of anti-conceptional methods are invited. But they are in most cases of doubtful efficacy, and the persons making use of them are subject to great harm. The French leather for instance (a kind of thin rubber pipe) interferes with the full gratification of the desire, and leads to serious functional disorders. The Dutch cap, which is an improvement on the other, is to be used with great care and caution, and the cost it involves is not within the reach of all. The Wish Bone Pessary and Stud Pessary largely used in Europe are out of

question in a country like ours both from the costliness and the difficulty of handling them. Before we can think of successfully handling them our medical men and nurses have to receive special training and women must be prepared to subject themselves to frequent medical examination. As our social conditions are, few Indian ladies are prepared for it. These methods are both, unsuited and impracticable. Moreover, the methods do not commend themselves to Indian taste and are in opposition to Indian sentiment and conception of morality.

As they are, the methods aim at the restriction of families. They encourage evil courses without fear of detection, and bring about moral degradation. They will be used for feeding animal passions and make man worse than brute.

We are not averse to birth control, but we cannot reconcile ourselves to the methods as obtain today in the West. It should be our endeavour not only to restrict the number of births, but to conserve energy in our interests as well as in the interests of the future generation. The conservation of vitality is essential both for worldly success and for healthy happy living. The labourer, who works with hands, needs it as much as the student, the businessman, the poet and the artist who have great brain work.*

*The Sanskrit word *virā*—warrior—is connected with *virya*. The *virya* is the one that conserves *virya*. Hence *Brahmacharya* is highly spoken of by our forefathers. The word applied to parsons in wedlock is note-worthy as it indicates the absence of sensuality in the marital relations, the main object being to beget a good son, *suputra*, to perpetuate the line. The word '*Astaputra prayatni*' is misunderstood. It refers to the different kinds of offspring—son being one of those. Birth control is not a new thing to us. There is nothing objectionable or repulsive as we often think. It is part of our religion and Dharma enjoined by smṛiti writers like Manu and others. The life of man is divided into four well-marked stages—*Brahmacharya*, *Grhastha*, *Vanaprastha* and *Sannyasa*. The first begins by birth and reaches completion by 25. During this period the student is to follow a course of rigorous discipline and self-control. He is to marry and beget children during the second. Begetting an only good son is regarded as special blessing. The number of days in a month when the husband can unite with his wife are restricted by our Rishis, each having his own choice in the matter. In the last two stages man has to abstain from sexual desire and develop self-control and concentration. Development of mind and body are the aim and object. Free indulgence even with one's own wife is condemned. Birth-control inevitably followed, and quality has the better of quantity.

But the view that the absence of sexual indulgence in the case of adults and youths is attended with harm is far from true. In most cases, harm results more on account of the prevalence of such a belief and the consequent lapses.

If young men suffer from emissions it is because of faulty diet, irregular habits and loose thinking. If they avoid taking stimulating foods and drinks, and keeping long hours, there is little to fear. By reckless waste of vital fluid the strength of the body and mind long acquired is lost. 'Continence,' as Sir Andrew Clarke puts it, 'does not harm, it does not hinder development, it increases energy and enlivens perception. Incontinence weakens self-control, creates habits of slackness, dulls and degrades the whole being, lays it open to diseases, which can be transmitted to several generations. To say that incontinence is necessary to the health of youngmen is not only an error but a cruelty. It is at once false and hurtful'. Good thoughts, good books and good companions are a proper guidance in the right direction. During waking hours one should occupy himself with clean pursuits or with books or friends that ennoble the soul.

But continence is not to end with marriage. It is to continue all life through if one wants to be healthy, happy and prosperous. The initiative as to when the wife wants to be the mother is to come from her. After pregnancy and during the period of suckling there should be continence so as to allow the mother to recoup her lost strength and vigour on account of child-birth and the child to grow fat on its healthy mother's milk. Otherwise, ill-health of the mother and the child is the result. Sexual indulgence during pregnancy seriously injures the mother and the child in the embryo. It is a fact borne out by recent American medical testimony. If delivery among birds and animals is easy and free from fatality, it is because of total abstinence from sexual indulgence once there is conception. If they are forced into sexual relations during pregnancy, the result is harmful even in their case. Physical and mental deformities, and congenital defects are to a large extent traceable to it. Miscarriages and nervous ailments in many a

mother cannot otherwise be accounted for. It makes the mother old before her time and incapable of tending children.

The subject is delicate but momentous and we cannot afford to disdain it as of little consequence. Never was the need so great as now to devise ways and means best suited to our antecedents and environments to guard against the undue increase in numbers quantitatively inferior.

Prof. H. Knew of the University of Women's Clinic of Graz in Austria has given valuable suggestions, the results of his long and careful observation for restricting the number of children without having recourse to any of the unnatural and harmful methods now in vogue. Dr. K. Oyino of Japan after further observation found them to be of inestimable value. The suggestions are practicable with no serious drawbacks in the way of their adoption. According to both the time of menstruation in normal cases ranges from 26 to 38 days. The following table may facilitate easy understanding.

The Menstruation Cycle.		Period during which conception extends
1.		2.
26.	...	9.15.
30—32	...	13.21.
32—34	...	15.23.
34—38	...	17.25.

They say that there will be no conception during the first 9, 13, 15, 17 days beginning with menstruation * The later period ranging from 16-26, 22-30-32, 24-32-34, 26-34-38 is likewise to be excluded. The early and the later part may be termed as the 'safe periods'. So a little prudence and little self-restraint may restrict the number of unwanted births and the consequent suffering and misery.

*This is in glaring contrast to popular belief and textual authorities. It is the general belief that the early fortnight is a fruitful period, and that there can be no conception during the latter half of the period. The *Susruta Samita*, taken so far as authority on the subject, tells us that when conception takes place on even days 4, 6, 8, 10 the issue is a male, and on odd days 5, 7, 9, 11 a female child is the invariable result. It makes one wonder how such a doubt could arise and how the truth

Experience and the testimony of history show that with the increase in prosperity, there will be a change of outlook for the better. Where there is abject poverty, and where children become an economic asset at an early age, we will have the extreme of undesirable increase of population. Where children begin to earn early as in factories or on farms new additions by birth or affiliation are not considered burdensome. If children are not forced to become income-producers at a tender age, and if the peasant is to retain a large part of his production for himself, the growth of numbers would be restricted. In well-to-do families a widow daughter-in-law, who has a son or a daughter seldom thinks of remarrying for a second time even though she be young and the custom allows remarriage. It is because the life is attractive, and she has something to fix her affection upon. But if she is in dire circumstances, she will marry again, though she is the mother of two or more children. She leaves them in the family of their birth, or with her parents or takes them with her new husband or leaves them to their stars and seeks support for herself. She has to prove unnatural to her children and go elsewhere to propagate once again, and add to the already unwanted existing stock because of the extreme poverty to decently maintain herself and her children. Again, in certain well-to-do *Shudra* families once the daughter-in-law begins to beget the mother-in-law for fear of social censure refrains.

But self-restraint to be wholesome and effective must proceed from the man no less than from the wife. We can never hope for it so long as woman remains ignorant and superstitious. Education goes a long way to remedy the untold evils which unrestrained indulgence leads to, but not the one now in vogue, which recognizes no difference between the education of boys and that of girls, and makes no provisions for the development of moral or ethical side.

Through proper books and by proper teachers boys and girls are to know the serious import of matters sexual, and the irreparable harm which youthful indiscretions may cause both to the individual and the race. There is nothing wrong in

knowing truths as these. But on the other hand, ignorance and indifference in matters such as these is attended with grave danger.

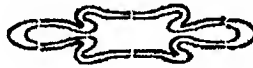
In order that woman may develop her body, mind and strength of character, she is to be free for a time from the worries of married life. It is then that she will be in a better position to discharge the difficult duties of a good wife and a mother. The raising of the marriageable age and the strict enforcement of the Sharda Act would go a long way to improve and check over-population. The choice to marry and when to marry is to be with parties concerned not with parents as at present. The need for birth control is greater with the poorer classes than with their richer brethren. With a little exercise of the will the interval between one child-birth and another can with great profit be extended. From an economic and health point of view it is in the best interests of the married couple, the children born and the future progeny alike. Sleeping on different beds is considered to be a right step in this direction. In America married couple sleep in different rooms with a doorway the key of which is with the wife* when they can afford, or on different beds when they cannot, but never on the same bed do they sleep for fear that it weakens the power to resist the will and by artificial excitement of the nerves badly affects the health. Besides cold bath is said to have a most salutary effect on the person when sexually excited.**

It is a glorious day when our women realize either through decent books or by intense propaganda the value of control and conservation. There will be less of unwanted children born, and less pressure for food and other things. Strength and vigour, health and joy, plenty and prosperity will reign amidst us. That birth control is a virtual necessity at the present state of our economic development admits of no doubt.

*See "What a Young Husband ought to know" and "What a Woman of Eighteen ought to know."

** How far it is efficacious it is for science to reveal. But when a person is too gripped by the death of a friend or a relative on whom he is fully drunk or in a swoon or mentally distressed when he has sensibility of cold water is taken,

The methods to be adopted are, however, to be least objectionable, free from harm, and not in violation of the culture and morality of the people. With the development of democracy and the rights of women, with the advance of education, agriculture and industry, and the rise in the general prosperity and the standard of living, natural, normal correctives begin to operate, and there would be no fear of over-population.



CHAPTER III

Capital

As in industry so in agriculture the three factors of production are land, labour and capital. 'Capital' consists in the instruments of production whether they take the form of complicated machinery or of simple tools like the spinning wheel, the plough or the pekota. In common parlance it means a fund describable in terms of money and with that we are concerned here.

Capital originates in abstinence. It is the result of saving, which pre-supposes a degree of thrift and prudence on the part of those who save. The desire to lay by something against sickness, old age or a worse morrow is instinctive with man. The growth of family love and affection, and the desire to secure a decent start for one's own children is another. The person that saves estimates the future value of the thing saved, and compares it with the loss of present gratification. If what he spends at the moment satisfies a more intense desire, and if his income is small, he does not mind saving for future.

With all these there was no saving at all until man hit upon suitable objects that could be preserved. For want of suitable materials saving was little practised in days of old. Food stuffs, vegetables, meat and fruit, though valuable, could not be preserved without fear of deterioration or total loss. Barns and cellars were founded with a view to save corn and wine. With the development of scientific knowledge new preservative processes have come in aid of man. The discovery of precious metals as a store and standard of value marks a distinct stage in the economic advance of men. With the coming into use of gold and silver, values of things were easily known and reduced to a standard, definite and certain. Business became easy and commerce grew, people found it easier and more profitable to store their wealth in these metals.

A man saves only when he has a mind to. His willingness again depends on such factors as internal peace and order, and complete security from foreign aggression. The Government would ensure freedom to the individual to develop in his own way aiding and directing him if and when he goes the wrong way, and make a sparing use of its power to tax. There should be no concentration of power in the hands of a few and no scope left for oppression of any kind.

These facilities do not avail at all unless people have the capacity to save. The individual income must be great, and in excess of expenditure. Facilities for safe and profitable investment for the amounts saved there must always be, such as the existence of a good banking system, Postal Savings' Bank, Co-operative Societies and Life Insurance.

The Theory of Interest

Interest is said to be the reward for the trouble and sacrifice involved in saving, the postponement of present enjoyment to future gratification. The statement does not stand too close a scrutiny. The suffering involved is not the same in every case. When the income of a person is say Rs. 20/- there would be little scope to save. When it is Rs. 100/-, a portion of it may be saved though with an amount of sacrifice. When the amount exceeds Rs. 1000/- no suffering need be felt in saving. Again, even in the absence of any interest people save to provide against sickness or old age. Before the Bank of England came into existence, the English kept their savings with goldsmiths for safe custody, and paid them something in lieu of their services. But the prospect of getting interest is an incentive to save, and the higher the rate the greater is the incentive.

As in the case of prices the rate of interest depends upon demand and supply of capital. With the rise of the rate there would be an increase in the amount of capital saved.

It is sometimes argued the other way. The greater the rate of interest, the smaller the capital saved. The person who gets say Rs. 1000/- by way of interest would not be

inclined to save that particular sum as for a less sum invested he would get the same interest. But man's wants are infinite and varied. Statistics point out that capital increases with the rise in interest.

Is Interest Justified?

Money does not beget money. It does not multiply like living beings. In olden days there was no borrowing for commercial or industrial purposes. Money was borrowed only for consumption. Hence the taking of interest was viewed with great abhorrence. The Bible, the *Qoran* and the early Hindu *Dharma Shastras* are unanimous in condemning it. The Christian nations of the Middle ages regarded money-lending as sinful, and left it to Jews, who in consequence were very unpopular. So great was the antipathy towards the persons carrying it on that writers like Shakespeare give us typical pictures of the class with a strong plea for Christian mercy, however, on the score of common humanity that, though Jews, they were still men 'with flesh and blood in them'. Nor is it true that saving always involves sacrifice. There is no justification for interest in the case of inheritance of vast accumulations. No suffering but mere accident would entitle a person to the accumulated wealth. Again, when capital is large it doubles itself in ten years, trebles itself in eighteen, and so forth with little effort or pain on the part of the lender. In all such cases saving goes on, and money multiplies as a matter of course.

Wealth has been produced and accumulated because of the guarantee that one could spend it as one liked, and that the nearest of kin would inherit the same. In the absence of such a guarantee there would be loss of saving. Thrift and restraint there would be none, and people would indulge in wasteful extravagance, and let things go as they come. Suppose the state by an act of legislature says that no interest should be taken, the result would be a great bull, and a deadlock in industry. Persons now lend because they have capital, and know not how to make use of it. They expect a

reward for it by way of interest. The bait gone there would be less of lending. A few philanthropists may lend to friends or relations, but society as a whole suffers. Sufficient capital would not be forthcoming, resources would remain undeveloped, and material progress would be arrested.

Rate of Interest

The sum borrowed is repaid with something over and above the amount. It is the productivity of capital that enables the manufacturer to repay the loan with interest. Productivity is the difference between the production of a certain amount of capital minus the production of the last unit. Where ten handlooms are at work the difference got by deducting the output of ninth from tenth loom measures the productivity of capital. Due to the Law of Diminishing Returns with every addition to capital productivity recedes. The greater the capital, the lower the rate.

The existence of artificial and monopolistic barriers, the risks of investment and the difficulties in the way of free flow of capital from industry to industry account for the varying rates in different trades. When there is no security or when the security offered is small, the rate is high. Loans at short call bear low interest because the borrower may be called upon at any moment to pay the amount. When time of payment is specified, the borrower has an advantage for which he has to pay a higher rate. The high rate prevalent in speculative concerns is the reward for the risks involved in the investment. Making allowance for speculation, the barriers and risks, interest like wages of labour tends to equal in different trades. If capital in one industry is more productive, it flows from the less fruitful concerns and equalises the rate. But so long these barriers exist different rates are bound to prevail.

The rate differs from country to country. It is low in some and high in others. Where previous accumulations are large as in France and England, low rates prevail. Reverse is the case with India. Though the people are willing, their

capacity is limited, the income being low. It is often said and with justification, that they spend a lot for marriages, dinners, funerals and other unproductive purposes. Besides, the demand for capital in old countries where resources are worked out, is not so great as in young lands like India and Australia with infant industries and undeveloped resources. Investment of the same amount pays more in young lands than in old, and hence the rate in the former is higher. The English bank rate is much lower than that of America or Australia owing to better security offered and greater confidence infused by the Government. With the increase of confidence of man in man, of one country in another, capital flows from land to land. But whether investment in foreign lands is in the best interests of the creditor and the debtor countries is a point which we may see when we deal with banks in India.

The Rate of Interest and Agricultural Indebtedness

The rate of interest in India is very high. It ranges from 12 to 36 per cent. In this wise agriculture presents a gloomier picture than any other industry. The costs of cultivation involve a large amount of capital. The demand is not continuous, but recurring during certain seasons in the year, and when it does, it rises enormously high. The necessity of the farmer is the opportunity of the money-lender to dictate terms and extract as much as possible. The absence of co-operative credit facilities in some, and their inadequacy to cope with the real requirements in other parts where they exist make the Indian *Sahukar* the master of the situation. With no go the helpless farmer plays himself off into his hands, and takes loans at ruinous rates. Law has not assigned any limit to this rate. The Usurious Loans Act and the Interest Acts offer but little protection. The law is uncertain, and no rate is regarded as penal if parties enter into contract as free agents, and there was no practice of fraud, coercion or misrepresentation. The practice of loaning corn on condition of return with an addition of half or one-fourth the quantity by way of interest is still rampant in rural areas, though it is getting

obsolete with increased facilities of transport and the rise in the money value of raw produce.

Of the indebtedness of the Indian farmer sixty per cent. represents past indebtedness, and forty per cent. the annual borrowing for seasonal purposes. The usual high rate of interest is to be met from the annual produce with the result that he is steadily growing poorer with little margin to live upon.

In the words of Mr. C. J. O' Donnell who held high administrative positions in the Government of India, it makes little difference to 300 million peasants what the Simon Commission may recommend, but, I fear, that the ryot will remain "the most pathetic figure in the British Empire" for, his masters have been unjust to him and Christendom will have one more failure to its discredit. The land revenue fixed years ago under more favourable circumstances has now become a burden, and during the last 50 or 60 years largely added to his indebtedness.

So long as the farmer remains in the abject state in which he now is, village uplift and economic progress are but an idle talk. If he is diseased, the rest cannot be hale and hearty. In him lies the strength and prosperity of all. If he is rich, all become prosperous. If he is poverty-stricken, the country cannot be otherwise.



milk sells at about five annas a seer—a rate which is higher than in many towns in Europe and America—the cheapness of Indian labour notwithstanding. The usual rate in Bombay is ten annas a seer. Even then genuine milk is out of question. Polluted milk conveys disease through microbes. Poor children are to grow without any milk. They are fed on condensed milk imported from abroad with no fat in it and on rice or other decoction leading to higher infant mortality.** The Child-welfare societies and the Baby Health weeks annually organized are but an empty show with little good unless the want of nourishing milk is made up.

The physical degeneracy of the present generation is not so much due to conditions, climate or otherwise as to the inadequacy of nourishing food, pure air and good sanitation. If the Indians are to be what they once were, strong of body and of mind, the quality and number of milch animals is to be improved. An English observer finely sums the whole thing when he says "Look how this country has degenerated; even its cows cannot grow horns'. Where cattle are emaciated with shrivelled skins sunken sides and stunted horns, people cannot be strong and healthy.‡

Pasture Lands

A certain extent of common pasture was provided in every village, and encroachment of the same was looked upon as heinous and irreligious. In most of the villages now there are no pastures worth the name. Cattle are let loose in the fields when there are no crops. The deterioration of the Indian milch animals is in part due to the want of pasture lands. With the rise in value of commercial crops such as jute, groundnut and cotton lands once set apart for grazing purposes are utilized for their cultivation.

*To supply milk to others especially to children is looked upon as a meritorious act, which none but the meanest would refuse.

** Medical science tells us that tuberculosis originates from childhood for want of sufficient good milk.

‡ Vide "Strength of Man is Power" by Sir John Woodroff.

The lands leased out or encroached upon are to be recovered, and those still in existence are to be protected from sharing a similar fate. To realize the same, some want to invoke the legislature, while others maintain that the state is to acquire new grazing grounds with public funds thus making the community pay for the wrong in leasing out or encroaching upon what really belongs to the public. Grazing and farming by rotation and raising fodder crops such as *jowar*, *Beli Jhola* (white *chulam*) napier, Egyptian clover, Lucerne, and the like is another solution suggested. It allows land rest to recouperate its lost fertility, and gives food to cattle and valuable animal manures to fertilize the soil. In villages adjoining mountains or forests, where there is plenty of uncultivated waste, this is easy enough. But the difficulty comes in villages where the holdings are pretty small, and every bit of land is under cultivation. The pressure on land being too great, would not leaving a portion for fodder entail too great a hardship on the poor cultivator? Where every inch of land is reclaimed with no facilities for cattle, agricultural production in the long run, due to the deterioration of draught animals and the want of animal manure, is bound to sink lower than in villages where sufficient provision is made for them.

Common interest and prudence require that a portion of land say, 1/10th or 1/20th may be reserved in every village for grazing purposes. If the land belongs to any person, the villagers are to pay its price and get it. If anybody is in wrongful possession, an appeal in proper spirit by Humanitarian Associations or the local Zemindar or the Government may meet with selfless response. That India, the most ancient land with vast expanse of land where the cow is revered and worshipped as nowhere else in the world, should feel the want of milk, and get it imported from America or Japan is an insult and shame to each and every one of her sons and daughters if rightly understood. With a total area which comes to one ninth of India, Japan still owns pasture four times as great as we have and sends us milk.

The want of proper and sufficient fodder is bringing a steady diminution in the number and milk producing capacity of our milch animals. In some parts during bad years in summer especially the animals have to live upon mere leaves such as the mango and young palmyra. It lowers the stamina and vitality and makes them more susceptible and less able to resist disease. Fed on poor stuff the milk they yield is little and deficient in nourishing qualities. With no economic loss to any one fodders can profitably be grown on waste lands, field and tank bunds, river sides, jungle and mountain parts.

Cattle Diseases

Besides under-nutrition the treatment meted to the animals in health and disease accounts for the decline in number and quality. In villages they are exposed to the extremes of heat and cold. In towns they are kept in crowded quarters and in the most insanitary and unwholesome places with undesirable results on animal and public life alike. Ten to one the animals are infected with some disease or other and it is folly to expect healthy milk from such animals. The time is come to move in the matter and offer facilities for dairy farms under healthy conditions outside municipal areas in the adjoining villages where there is space, air, water and fodder sufficient for the animals.

Scarcity of water during the dry part of the year has most deleterious effects on the health and growth of animals especially of buffaloes. New tanks dug or old ones repaired make up a long felt want in many of our upland villages.

Animal diseases cause more havoc than malaria, influenza and cholera do among men, and the farmer is left helpless with no draught and dairy animals. Whenever such a devastation occurs, it takes long before he completely recovers his economic position. In his ignorance the farmer attributes the infection of a disease on a large scale to some evenging goddess or supernatural agency, and leaves everything to chance or Nature. Want of proper and timely treatment leads to much loss which could have been avoided

with a little care and medical aid. In days gone by many people were versed in *Go-chikitsa*.* Now few care for it. Great sensation is often caused in the name of religion for the slaughter of a cow here or a cow there. What effective steps did the religiously minded take for avoiding the death of millions of cows every year by some disease or other?

For this valuable branch of knowledge more attention is hereafter to be paid. Institutes with facilities for research affiliated to some University or other are to be started to make a study of the subject—the various diseases, their origin, symptoms and remedies. The efficacy of herbs, roots and other remedies in vogue may be tested, and if found effective can be distributed.

Medicines are to be prepared from herbs and roots locally available, and made familiar to the farmer. The preparation costs him little, a day's or half a day's labour at the most. In the case of foreign medicines the cost is high and sometimes higher than the animal treated.

Breeding Animals

The deficiency of suitable breeding bulls and buffaloes has adversely affected the quality of the stock. If good milking cows and buffaloes are to be produced and efficient draught animals secured, the want is to be made up. Due to the custom of dedication of bulls to some god or goddess or in the name of a diseased person at the time of *Shradha* there were enough of good stud-bulls in days gone by. But in the light of the rulings of the Indian High Courts it is not an offence to take or deal with them as one likes. It does not come within the proviso of the penal law of the land, and the person incurs no criminal liability. The animals are either sold to be decorated for street shows, or put to scavenging carts or slaughtered by the butcher. It is time for the Legislature to safeguard the public welfare by a legal enactment. This will encourage generous souls to dedicate as of old, and those who maintain good bulls for propagating a better type of cattle may be given grants as in Ireland and some other European countries.

*Vide *Brihat Samhita* of Varshamhira,

Cattle Insurance

To a large extent cattle constitute the wealth of our land. Expressions like *Pashu Dhanam* (cattlewealth) connote the importance of cattle. So it is well to provide against harm to this kind of wealth as it is in the case of any other. In the West there is scarcely a thing that man values which is uninsured. In India cattle insurance, as we will see, has made little headway.

Protection

There is a steady decline in the number of good cows in our country. The best milkers find their way into towns, and when they become dry, they are sold to the butcher. Large numbers, which have not calved even thrice and whose milking capacity has not declined, are slaughtered in our towns. Calves and cow-calves capable of bearing form no exception. The life of a cow or a she-buffalo is more valuable than that of a male animal. Killing a bull is taking one life. But killing a cow or a she-buffalo is killing an infinite number of future progeny. This question is peculiar to this unfortunate land. Nowhere does it occur. In Europe and America cattle are reared for two distinct purposes: one for food, the other for milk. Bull calves are slaughtered, but none thinks of killing a dairy cow. Even here the silly shepherd shows himself more prudence in the matter of sale. He parts with the male goat or sheep keeping the best for purposes of breeding, but never the ewe or the she-goat unless it is past the age of breeding or infected with disease or otherwise forced to relieve a distress. But no such discrimination in respect of the most useful of domestic animals—the cow and the she-buffalo.

To arrest decline the first thing to do is to totally prohibit within municipal limits the slaughter of useful animals and to increase the fees with regard to the slaughter of the rest. An intelligent electorate can make its power felt by concerted action if the municipal body is either indifferent or lukewarm in the matter.

Total prohibition it is not easy to secure. Beef is now required for the European army and the civilian population. If beef is imported from abroad and specific beef-raising industries are started so that no useful animal may be slaughtered, this can easily be checked. Lastly, the levy of a duty on the export of hides and skins acts as a deterrent on the reckless export for foreign markets. The export of fine breed is to be prevented by legislative action or checked by heavy export duties.

In the production of mutton and lamb wool is a by-product. Of the two types of sheep the large bodied with scarcely a vestige of fleece and the small bodied that have fleece, the land is deficient in the latter. If wool industry is to develop in our midst, it is imperative that the wool-yielding type is to be introduced from abroad, and indigenous animals crossed by wild ones as in Germany

Prevention of Cruelty

Nothing is so much talked of, but so woefully neglected as the care of cattle. People often invoke religion and *Swadharma* in the cause of the cow, and thereby bring more sorrow and suffering upon their poor heads and those of their neighbours than real relief to the animal. For the protection of the cow many societies have sprung all over the land. There is in them more of religion bigotry and narrow intolerance. Better far would it have been if the principle is broad-based and all-embracing, if the energy employed for the protection of the cow is directed towards improving the condition of the cow and other useful animals. The method of slaughter is out of date, and much of the cruelty can be avoided as the Animal and Anti-nivisection Society in England has done under the leadership of the Dutchess of Matilton. Unspeakable pain is often inflicted upon the draught oxen. Day in and day out the same pair is used most cruelly and with little rest. Most abominable of all is the treatment meted out to the calf. Save the agriculturist, a few others here and there, the rest, who either want milk for direct use or for commercial gain, do not like that the calf should share its mother's milk with

them. So calves are starved, and do not get the milk they need. In towns where milch animals are kept for economic gain, the young calf is uneconomic and burdensome. It is sold away or starved to death and thrown into the dust bin. But if the cow is sensitive the calf cannot altogether be dispensed with, and so a dummy calf takes the place of the original to deceive the poor animal. But this brings in a natural decrease in the number of animals of high quality. The effects are no better even in the case of calves that stand the stress and storm of starvation as it tends to diminish vitality of the future stock.*

From a purely economic point of view the deterioration and loss of cattle tells against the prosperity of agriculture, in which every son of the soil be he a Hindu, a Christian or a Mahomedan shares to an extent. That apart, the caste Hindu values cattle for the milk they yield. The Christian makes use of their milk and meat. In addition to these the Mahomedan makes a profit out of the trade in hides and skins, which is mostly in his hands. So rearranging the names in order of importance and duties cast to improve the stock the Moslem tops the list, the Christian comes next, and the Hindu last. So all should join hands in trust to improve in friendly cooperation what is of such vital importance to the nation, and the individual from an economic standpoint.†

The cow, in short, feeds the child, the patient and the adult. She furnishes draught animals to the farmer, and with her valuable manure fertilizes the soil and increases the output. In her infinite capacity for varied usefulness, she is second to none. The word 'cow', however, is not to be understood in its narrow sense. The word means and stands for the sub-human world—the buffalo, the sheep, the goat and others.

*Vide 'The Survey and Census' by Mr. Blackwood, Director of Agriculture, Bengal.

†Virataparva in Mahabharata emphasizes this simple economic truth when it says that where cows are found in large numbers there would be plenty and prosperity. The destitute condition of agriculture in the United Provinces in our day is in no small measure attributable to the deterioration and decrease of good cattle.



CHAPTER V

AGRICULTURAL RESEARCH

SCIENCE has come in aid of man to increase production. It has given him control over soil, seed and season. Physics has enabled him to study soils, and take hold of products which Nature has given him, and turn them to his needs. Biology supplies what physics has missed, and enables man to wrest from nature what he needs. Sheep may make wool for man's needs, but man may evolve the sheep that yield the kind of wool he wants.

The Imperial Bureau of Soil Science has directed researches in Soil Science, plant genetics (dealing with plants and grasses) fruit production, entomology (dealing with the structure, habits and classification of insects) parasitology, animal nutrition, disease etc.

For the important topics of agricultural science it is the clearing-house of information. Research workers in the Empire supply it with abstracts of papers connected with researches free of cost. Towards the central funds £20,000 are annually contributed by 38 Empire Countries. As a land of agriculture and a member contributing her quota India is interested in the work.

To find out at first hand how the several countries tackle their problems directors and research schools pay annual visits to important research centres. The Bureau of Fruit Production at East Malling and of Plant Genetics at Cambridge are regularly running journals. Over 200 journals in different languages are read by the East Mallings Quarterly journal for 'Horticultural Abstracts'. The Cambridge Quarterly publication, 'Plant Breeding Abstracts' collects material from 650 journals. They are a pool of information on which all can draw. Each is fed on a mass of papers, journals and books, the harvest of research laboratories in the world. The methods of 'etiolation' by which shoots are turned into

material for use as apple, plum and other desiduous fruit tree cuttings are applied by the Java research experts to tea, rubber and citrus plants with excellent results.

Hundreds of new varieties of plants unknown to science are being collected by Russian workers. The Plant Industry Institute at Leningrad contains 40,000 wheat varieties besides collections of other crops. Of the 1600 cultivated plants, according to Dr. Vaviloff, Southern China and Dravidian India are the home of half the plants.

Tropical crops are made to grow in colder climates by the American method of photoperiodism by artificially adjusting the length of the day by shortening day light or adding to it by electric light. Seed is kept at a given temperature under a given humidity for a given number of days to make it grow in different climates and seasons. Cinchona grown hitherto in the tropics is now grown near the Black Sea.*

The study of soil physics enabled man to know soil deficiencies in chemical ingredients and make up the want by scientific manures.

The need for research in agriculture and everything that concerns it is all the greater in the case of a country like India with unbounded resources not yet developed and with its agriculture in crude infancy. The Imperial Council of agriculture appointed Committees for special work. One of them is directed to make a study of the existing data and correlate results of experiments with different kinds of manures such as the farm-yard manure, the green manure, oil-cakes, bone meal, fish-meal etc., and to devise ways and means to conserve, cheapen, extend the use of Indian manures. Further research is directed to unfold the possibilities of manures in unirrigated tracts and on lands with defective irrigation facilities.

The institution at Coimbatore is functioning as an affiliated centre of research with a well equipped staff of able

* Vide The Hindustan Review Jan. 1935.

Agriculture Old and New

by Mr. H. V. Anand Murthy M. A., I.C.S.

Director of Agriculture, Madras.

specialists. The Mysore University and the Agricultural Department are conjointly conducting researches on valuable problems of agriculture. If progress is to be rapid, assured and effective, the several institutes are to be financed and encouraged by the state and the public. The Sarvabharati Rural Institute of Agriculture and such other isolated institutions are to be affiliated to University colleges with professors in science at their head and with full facilities for travel for study of foreign researches and in the light of accumulated knowledge and experience carry on further investigations to suit Indian conditions, and bring home the results achieved to the people by a comprehensive plan of instruction.

Irrigation Works

Climate, soil and water are essential for the growth of plant life. We have a rich and varied climate, and soils of different grades of fertility. And for water rainfall is the main source. But as it is, rainfall is uncertain and precarious, and not uniform in every year and at every season. Works of irrigation alone make agriculture more efficient, and less dependent on the capricious nature of the monsoons. Through channels and canals the Ganges, the Brahmaputra, the Godavari, the Kaveri, to mention a few rivers amongst many, irrigate thousands of acres. Besides being an unfailing supply of water, these channels fertilize the land with the rich alluvial soil they bring along with water. This apart, they serve as an excellent means of communication and may be utilized as good feeders to the railway where it exists; and in areas where it does not, will serve the purpose quite as well or much better than the railway. The cost of construction being far less, and the charges of transport much cheaper, they have a far better claim for adoption. Both in the matter of production and in the matter of transport for marketing purposes the cultivator has a double advantage.

In recent times quite a lot has been expended on the construction of gigantic irrigation works. The Sukkur and Mettur projects are living monuments of modern engineering

skill. But considering the woeful want of water in most of our villages, the carrying of minor irrigation works alone is capable of solving the problem. Then alone do thousands of villages be touched, and the benefits conferred be real and within the reach of all. The construction of new works of irrigation and the strengthening of existing ones so as to increase their capacity to storage stands the cultivator in good stead by providing against uncertain monsoons. Works undertaken by the State, the prince and the local Zemindar in times of depression within famine areas do in addition extend temporary relief to millions of people who otherwise would be helpless victims of dire need and destitution. Where minor irrigation works are of doubtful efficacy due to the limited nature of rainfall in certain areas or during certain seasons, tube wells constructed on a cooperative basis do serve the purpose.

Cattle Manures

Being under cultivation for centuries past, Indian soils are showing signs of exhaustion. With the increase in population all the available fertile land in the country is brought under the plough. New lands not being available, the other course open is to raise more crops from the same land by intensive cultivation.

The principle of manure is to return to the soil what has been taken from it in the form of crops. The farmer converts manure, nitrogen and phosphoric acid of the soil into the crops he grows. To supply an adequate quantity of manure of a particular kind the farmer should know before-hand what the plant he proposes to grow requires, and what the soil lacks in. The Indian farmer is conversant with such manures as are traditionally in use. He mostly relies on cattle manure. Investigation shows that it possesses better nutrition than any other kind. In the vegetative stages of plant growth it helps to a greater extent the absorption of proteins. Plots receiving animal manures do not lose so much as those manured with ammonium sulphate. But cattle manure is not of late receiving the consideration it deserves. Dung is put to the most uncon-

mic of uses. It is largely done into cakes to be used as fuel with the result that the most natural and the most easily available manure is lost to the farmer.* The extreme poverty of the people, and their inability to secure sufficient clothing force them to utilize dung for warmth against winter cold. If agriculture is to improve, other kinds of firewood are to be made available, and cattle be better cared for than at present.

More valuable than the dung is the urine, but is allowed to go to waste. It can be collected in the liquid state and utilized or the manurial qualities can be preserved in fertile soil secured for the purpose. The urine soaked soil can from time to time be removed for use from the places where cattle are kept.

Green Manure

In supplying the deficiencies of soil it is found to be very efficacious. Where two or more crops are raised on the same plot by rotation, the yield would not be as great as when one crop is grown unless manures are used. But if the first crop raised is jingelly, the subsequent yield is not affected by the simple reason that the crop while taking something from the soil, returns some thing in the form of fallen leaves and flowers of which it has in abundance. Of two wet fields of equal fertility the one wherefrom grass is removed before transplantation yields a poorer crop than the one where grass is allowed to grow. If nothing is added by way of manure, the paddy plants in the one will be of poor stuff while a vigorous growth is perceptible on the other.

Green manure aids the growth of crop. With little diligence green manures can be prepared out of the innumerable wild plants and weeds with their leafy foliage seemingly

*The ash though used as manure is of little efficacy. It loses much of the manurial value in the process of burning. It is interesting to note that all dung is not of equal efficacy. It depends upon the kind of food and the age of the animal. If food is of high quality, the manure would be rich. The dung of an aged animal is more nutritious than that of a young one as there would be less of assimilation in the former case than in the latter.

useless for all purposes. When the plants are of a prickly type or of a strong kind not liable to easy decay, they are to be consigned to trenches dug for the purpose, and left for a time to putrefy for use.

Oil-cakes

Indigenous manurial articles are recklessly exported abroad when there is immense scope for their utilization at home. On account of the export of oil seeds and oil-cakes India experiences a severe loss in an important kind of manure. A great maker and consumer of oils from early times India still exports large quantities of oil-seeds of every variety. The United States uses almost the whole of her production for her consumption, and China exports one variety alone. The result is that we annually import finished oils to the value of about 6 crores of rupees which can be easily manufactured at home and the consequent loss of cakes* to fertilize the soil is immensely great. From 1925—1930 our export of cakes every year amounts to about 2,14,000 tons.

The best way to conserve oil cakes for manurial purposes and to cheapen their price is to develop oil crushing industry in the country. But the objections in the way are set forth in a note sent to the Committee of the Imperial Council of Agriculture Research. The high cost of transport from agricultural parts to countries of manufacture, the want of cheap suitable containers, the high import duties on oil machinery and spare parts, the breakages and delays incidental to long transport, foreign competition and want of organized markets for the finished goods are reckoned as some of the causes that stand in the way of development.

Bone Manure

It makes up the deficiency of phosphates in the soil. It also helps to an extent to remedy the nitrogen deficiency.

*Even in the case of oil crushed in the land the oil monger uses the cake for fuel. But it is surely used as manure. The cake is of special value to crops like the cane which has great possibilities of future development.

Small bone-crushing machines may be supplied to up-country centres that have a sufficient supply of bone to which bone can easily be transported from surrounding parts at a cost almost negligible. The Fertilizers Committee set a prize of Rs. 3,500/- for a ^{bone}home-crusher, cheap, durable and simple having the power of a small engine used for lifting water or crushing sugar cane with which the farmer is familiar. The bone, which is practically of no use now, can be converted into a useful manure.

Sewage and Other Kinds of Manure

Large amounts of fertilizing ingredients are lost in the form of sewage and decaying vegetation. It is roughly estimated that 100 crores of rupees worth of fertilizers can be made out of these. The conversion of these materials into easily available manures enhances fertility and crop production. It lies on corporations and Municipalities to open a new department with facilities for investigation so as to turn what is a source of nuisance now into a means of high productivity in the interests of the public and the country.

As the Board of Agriculture has recommended in 1917 and 1919 the first and foremost thing to do is to protect indigenous manures by imposing an export tax on oilseeds and cakes, by a total prohibition of export of bones and fish manures and by extensive propaganda to spread the use of these manures. Twice the proposal for protection came up for discussion before the Council of State, but it fell through on both the occasions as the Government spokesman was against it. Better would it have been if the Government of India were to come to the rescue of the Indian farmer.

To the detriment of the ryot, who is too ignorant and disorganized to protect his interests, various artificial fertilizers of doubtful efficacy are put in the market with alluring advertisements by foreign dealers. Hence the need for an All India Fertilizer's Act on the lines of the British Fertilizer's and Food Stuff's Act of 1926 so that the unduly exhausted soils may gain in richness, and productivity may increase.

Seed Selection

Crop yield can to a great extent be increased by a proper selection of seed. Disease-resisting varieties are to be preferred to high yielding varieties that are susceptible to disease. In paddy and cotton new varieties of seeds have added to production by 10 per cent. But with new varieties of sugar-cane new diseases unknown to our farmers are imported, and in many cases the loss on this account far exceeds the actual benefit, which the farmer derives by the introduction of different cane varieties. Whether in the nursery or on the field mosaic preys on the cane. The best course is to discard seeds amenable to disease, and replace them by other kinds that are free from it. The Coffee Experimental station in the State of Mysore has yielded good results in the breeding and manuring of coffee and the control of coffee diseases. The quality and quantity of oil can likewise be increased by a proper selection and distribution of the seed.

Plants and Pests

It is not possible to calculate the harm done to crops by insects. In the nature of things it is not easy to prepare statistics, which will be accurate and reliable. When their number is small, the insects can be caught and destroyed by removing the branch or the leaves on which they are found. But when their number is large a bright fire made for the purpose would attract large swarms that fall in the fire and die. When the jute plant is subject to the ravages of the red herry caterpillar, the farmer sets fire to stalks of kumbu or jute, and runs round the infected plots during the dark of the night so that insects courting light destroy themselves. Introduction of natural enemies of insects is another device known to and practised by the advanced states. In America and Australia birds that specially prey upon harmful insects are brought from outside and allowed to grow in abundance. All insects are not harmful however. Some are friendly to plants; others fertilize flowers and increase yield.

Much harm is often caused in our land by wanton interference with the laws of Nature. Thousands of birds are being killed for sport. To take innocent and harmless life is no real sportsmanship. It is the very negation of it. Man transgresses into the domain of animal and bird life by clearing forests. Apart from narrowing down the wide range of creation, and rendering life a dull monotony, such a course is disastrous from the point of view of production.

In America with a view to know the value of bird life to agriculture two farms, each about five miles square, were taken for experimentation. Birds were totally destroyed on one, and every facility was created for their multiplication on the other. In the course of three years all vegetation disappeared from the first farm notwithstanding the richness of the soil and copious water supply, the insects having enormously increased, while the other yielded an abundant crop the number of insects being checked by the birds present.

In India the pest menace is strongest in the district of Coimbatore near the Nelagiris and in the lands adjoining the Simla heights. The reason is not far to seek. The official and the landlord, who stay for a time to enjoy rest, go on sporting excursions. They reduce and scare away natural life for the mere love of sport. For no fault of his the farmer heavily pays for it. Swarms of locusts and other insects eat green vegetation in no time and leave the lands desolate.

The farm-rat causes great loss to the farmer. It eats the crop both in the dry and wet lands and stores up quite a lot in its zig-zag holes. Birds are scared by hues and cries, and by strings thrown from raised platforms at the time of harvest. Nothing to fear of and quite secure in its place the rat does its work silently and from within.

Herein lies an extensive field for study and investigation. The origin, growth, habits, food and natural enemies of each of these can with great profit be secured and supplied.

The Humanitarian Leagues and Cow Protection Societies, can with great advantage broaden their scope and extend their activities to other innocent species, which, seemingly of no

consequence, are real benefactors of the agriculturist. Here and there we have museums with a few birds and animals maintained at a high expense to the public. Will not our forest reserves provide for swarms of innocent life abundant room at a little cost ? In America sanctuaries are many and so close to one another that birds can easily migrate from place to place without fear of sportsmen. Will it not be better that licences of fire arms intended for the slaughter of the most innocent and the most harmless of God's creation on earth be refused, and natural museums or sanctuaries created both for amusement and benefit of man ?



CHAPTER VI

RURAL UPLIFT EDUCATION

IGNORANCE and illiteracy are the two crying evils of our village folk. To drive them off the land, schools are being established in many villages. But a mere knowledge of the three R's does not make the farmer any the wiser or better for that. What is needed is knowledge and culture that are of value in making the farmer happier and more prosperous. The education now imparted does not and cannot bring in the longed-for millennium as some hope to. The village-school master is not of the proper sort. He takes to the profession because he has no other. We do a great disservice to the cause of education if we leave it in the hands of ill-equipped persons with the self-complaisance however, that the number of schools and the number of school-going population is on the increase. At the most impressionable age of child the need is all the greater for the most competent and the best qualified teacher. The object is and should always be not to provide a living to a person here or a person there, but to foster the brain of the child and further the economic future of the land.

The authorities in charge of education in rural parts—the state, and the local boards may note that the real life of India is lived outside its towns, that 80 per cent. of the population live on agriculture alone, that their numbers are being added to every year, and that 10 per cent. more are occupied in supplying the wants of peasants. A knowledge of the Laws of hygiene, sanitation, chemistry and other sciences in so far they have a practical bearing on good-living, agriculture, co-operation cottage industries, and marketing and of social and economic conditions outside India is quite essential.

That theory is to precede practice, and that without a fair amount of theoretical knowledge there can be no practical fruit is a false notion. Except in the case of those who want to specialize in a subject or carry on research work it is superfluous. The theoretical knowledge is not for all. The more one knows it, the less practical he is wont to be. Theory, which aids scientific research, is and ought to be with a few gifted souls that have a special aptitude and take to the work with a sort of devotion nothing short of the religious.

In close proximity to the village school there should be an experimental farm and garden to give an agricultural bias to the pupil on plants, pests and manures.

The Farm Labourers' School at Palur, Anakapalli and other places are not able to confer the benefit expected of them because in the distressed economic condition of the farmer agricultural education extending over years is a forbidden fruit. During the busy seasons of the year the farmer is in dire need of the services of his sons. If agricultural education is to be real, short practical courses in farming methods, plants, pests, manures, dairying, poultry-farming and the like extending over a few months at the most are to be given. The knowledge must be one which they can make use of when they return home.

Touring Lectureships

In the case of young people that can afford the expense the school is a proper forum wherefrom the seeds of learning can be sown. But what of adults and those that for financial reasons cannot afford? Touring lectureships on a large variety of subjects of interest both at home and abroad in the language of the locality will make up the want. The professor, the teacher and the student, who enjoy long vacations are specially fitted for this pleasant task.

The University extension lectures now in vogue and confined to a few important towns are to be in the language of the people, and extended farther into the nooks and corners of this vast land if education is to bear fruit and be a reality.

Into the professor and the student it infuses a new life and vigour, and gives them a clear insight into the realities of life, and its manifold problems. It is not a vision or an ideal. America teaches her millions by this method. So also Denmark and Sweden.

The Cinematograph

With most people seeing is an easier and a more impressive way of learning things than hearing. As at present constituted, the cinema with voluptuous scenes and sensational stories has results not always to be desired. A right choice of subjects and stories will make it an instrument of great educative value at a comparatively low price combining useful instruction with living interest. The film industry, which has infinite possibilities of future development, is to take a new turn for social, moral and economic betterment of the people.

Library and Reading Rooms

Books on agriculture, industries, sanitation, horticulture etc., are of value, only when education becomes general, and people can read and understand for themselves. But with our people still steeped in illiteracy libraries and reading rooms cannot bear the expected fruit.

Broadcasting for Rural India

When people are illiterate, instruction must be oral. Enlightenment and culture are the urgent need of our people. The wireless, the miracle of the West is of greater service in India, where communities live in isolation in scattered villages.

In the case of a tour of instruction much time is wasted by travelling from place to place; and by the time the lecturer leaves to the next village, his instruction is liable to be forgotten. Through the radio useful information can be reiterated at frequent intervals.

But the radio lacks the human touch, the personal magnetism that go with the physical presence of the instructor.

Requiring as it does a colossal staff of trained men and a mammoth organization, it would be the dream of a visionary until the State takes it up*.

Demonstration

Seemingly simple the several processes involved in agriculture require an amount of varied practical knowledge, experience and prudence. To begin with, ploughing is what it was centuries back. The traditional plough is in use. The jat and the Monsoon ploughs serve him much better. Two ploughings with these equal to four with the time-honoured one. The extra produce realized on account of their use on an acre of land more than covers their cost in one year.

In planting, manuring and growing crops there is much to learn from foreign methods and research. Steeping paddy seed for thirty minutes in a two per cent. copper sulphate solution before it is sown makes it free from root rot.

In growing commercial crops such as cane the several processes call for great care and attention. Economy and convenience demand that setts should be raised in straight rows. 20,000 setts per acre are common in our country while in Java 6,000 setts are found to be sufficient. Water is to be carefully regulated; too much or too little of it spoils sprouting.

The method of mixing manure with the top soil is wasteful. The plant does not derive full benefit. Making small pits of about a foot and filling them with manure is found to pay more amply. The manurial qualities get within the reach of roots, and when absorbed, more goes in that direction to restore the deficiency.

Experiments made at the Indian Institute of Commerce have shown that artificial fertilizers cannot by themselves maintain crop yield, and for the purpose organic manures are indispensable. In the case of cane 50 lbs. of nitrogen from organic manure by way of oil cakes and 50 lbs. of artificials per acre is found to be efficacious.

*The present Colonel E. R. Hardinge in the Asiatic Review 1984.

These simple truths can be carried home in an appealing way by demonstration alone. Farms established with this object in important rural centres, one at least for a group of fifty villages, serves the purpose. The farmer sees the thing, and what he sees makes a better impression on him than what he hears.

Attached to every farm there should be an agricultural and industrial store where different kinds of seeds, agricultural implements and improved hand machines can be had at reasonable rates. Besides, where local conditions are congenial fine breeds of cows, fowls, bees and silk worms are to be reared both for demonstration and for sale, while indigenous medicines and vaccines both for prevention and cure of disease should be made available.

Marketing

Of the two processes of production and sale the latter is by far more difficult. With the factors of production under his control the manufacturer finds it much easier to increase production. But when it comes to the question of marketing the difficulty comes, for while production embodies past sacrifices, consumption has an element of uncertainty about it. Things being made for future demand, there is no knowing before-hand how much of it is required in a locality, and at what price. A change may upset all calculations, and the stock may remain groaning for the market. To stimulate demand a lot of money is spent on advertisement. The person that knows the art pretty well has a better chance of success than one who has a better stock but lacks the art.

Agricultural production is no exception. The poor farmer is waylaid with obstacles on every side. Add to the uncertainty of future demand the raw material he produces is mostly to supply the necessities of life or material for manufacture. It is a well-known dictum of economics that demand for necessities is inelastic and does not rise with a lowering in price as in the case of manufactured goods.

which are largely luxuries of life. The farmer produces, each for himself with no knowledge of the price, the demand, or the market as a matter of course from year to year. Since things are no longer produced for a local market, but to satisfy world demand, which is liable to violent fluctuations, the danger is all the greater.

These apart, the Indian farmer is subject to disabilities peculiar to him. He is always in debt and in sore need for money especially at the time of harvest to pay the creditor, the landlord and the state. To defray the expenses of cultivation he has to borrow at usurious rates, and that often on the security of commercial crops raised with penal conditions for nonfulfilment within the time specified. He has not the freedom even if he has the mind to store the produce in anticipation of a better market.

A fair price for the materials and a reasonable margin of profit after the expenses are defrayed is what he most looks for, but often fails to realize. Under the disorganized state of the market it is vain to hope for anything better. In the months of November and December 1931 groundnut sold at Rs. 40/- a candy. But in the early months of the following year the price had risen to Rs. 70/- thus benefitting the middleman and not the prime producer. Again, jaggery sells about Rs. 4/- an imperial maund when it gets out of the hands of the producer. The consumer pays Rs. 8/- a maund, and the middle man pockets cent per cent. profit. So long as it is got for the usual price the consumer does not pause to consider as to who makes the profit.

With a view to eliminate the middleman's profit and ensure to the tenant proper price for his product co-operative societies of sale are to be organized in important villages with district centres. These societies are to advance him money, half or three fourths the value on the security of the crop so as to wrest him from the cruel clutches of the money-lender. When the market is favourable these societies can dispose off the stock through the district centres and thereby enable the cultivator to secure for himself the fruits of his

labour. The cooperative Sale Societies started for financing groundnut crop in Coimbatore and South Arcot districts can with great benefit be extended to every commercial crop in all parts of the country.

Overproduction leading to a glut of the market is the cry of the day. In his ignorant, isolated condition, it is too much to expect of the Indian farmer to know when and where his produce is in demand, and how much of it, and at what price. Matters as these can best be looked to by a body which by its knowledge, experience and influence is competent for the purpose. The scope and field of activity of the statistical department is to be enlarged. Figures relating to agriculture, industries and commerce are to be collected and published for the benefit of the prime producer of the soil.

Till of late reliable statistics of industrial production and inland trade practically there are none. The normal out-turn figures of crops are often inaccurate, and the crop forecasts are in consequence defective. Statistics of cattle, of dairy products, of forests and fisheries are non-existent.

The statistical department at Delhi should be the nucleus of a parent All India Statistical Organization with branches throughout. Statistics are to receive scientific treatment, and information of crops and cattle, of raw materials and industries, of trade figures and conditions in and out of India are to be gathered and assorted under various heads. It is only then that statistics would be reliable and of value to the specialist to scientifically view the subject or build new theories. The department no doubt costs a good deal necessitating the services of the expert and the statistician trained for the purpose, but the work is well worth the expense. As for statistics of rural areas few villages here and there may every year be taken on sampling basis and information collected and figures prepared.

With no rival India has a natural monopoly in jute. With all that it is not fetching the income it ought to, and the reason is ignorance of production and marketing. The inaugu-

ration of information bureaux and foreign agencies to study the conditions abroad go a long way in the direction.

The existence of innumerable local weights and measures is another disturbing factor. The trader takes stock of the situation, and playing on the ignorance of the farmer, exploits him for his benefit. A uniform standard of weights and measures throughout the land leaves little scope for foul-play and dishonest dealing.

Absence of facilities to preserve the produce for a favourable market is another disability the farmer labours under. For want of proper accommodation he has to part with the produce without even getting it home. Generally speaking, he lives in a thatched hut or a hovel which is in constant danger of being blown, washed and consumed by wind, flood and fire. Licensed warehouses are, therefore, a virtual necessity and every village must have one.

Add to these, the absence of cheap means of communication is an impediment in the way of marketing. The railway extends over a large area. Still thousands of villages remain outside its pale. Unturfed and unmetalled roads cover a larger part. Considering the vastness of the land their extent is too small. The village tracts are to be rendered safer and more convenient and feed the main trunk roads. An excellent means of communication water-ways do nevertheless offer high irrigational facilities, which are the sore need of the land.

The Panchayat

Properly organized and directed it is capable of great expansion with high potentialities of useful work. The word has lost its original meaning and significance. It now refers to a body of five or less persons that merely exercise little judicial powers. It was the original village council or Sangha—a representative body consisting of 30 or more members elected from the different castes. According to the requirements of the locality it was divided into a number of committees each being in charge of one department.

It can be revived and reorganised, and each committee entrusted with duties and functions in the light of changed conditions of modern village life. One committee is to look after sanitation, the construction and maintenance of streets and drains, a second after construction and upkeep of tanks and channels, a third after animals, their diseases and pastures, a fourth after seeds, pests and manures and a fifth after industries and marketing and so forth. New facilities for supply of water from tanks or canals can better be handed by co-operation than by individual effort. Pumping sets, the maintenance of which is beyond the financial reach of any single farmer, can be jointly maintained for the whole village or special portions thereof. Again in the matter of popularising fine varieties of seed, manures, or in the matter of encouraging and assisting weaving, spinning, dyeing, poultry-farming, and corporate marketing. Special committees of the Panchayat enjoy a natural advantage and can do better work than any body, public or private.

Cooperation

In the uplift of rural India it is to play an all important part and that in a variety of ways. No country so sorely needs and none has so congenial a field for co-operative development as India has. Though modern in its completed form the seeds were nevertheless visible long ago in the social fabric of India in the joint family system and the custom in villages of mutually helping one another financially or otherwise in times of distress when flood, fire or famine occurs. Except putting the farmer in possession of funds, and that not adequately in all parts co-operation has not made great headway in any direction. As yet co-operation has not felt its power and strength. Greed for power and prestige, a spirit of distrust, and a love of selfish gain characterize those that now fill its fold. Real co-operation has no place for any such.

The morale of the middle-man, who now controls and manipulates trade is to improve or he is to vacate the line for better men with a higher and nobler purpose. In the attainment

of the object the educated youth specially trained by a competent staff may be of use. Improvement next in agricultural implements, manures, seeds and a deal of such valuable work cannot be done better by any other body. With the help of building societies co-operation enables the farmer to have better housing accommodation. The construction and maintenance of tanks, irrigation channels, tube-wells are not not easy of achievement without it. Co-operative Societies and Land Mortgage Banks have, as we will see, a great part to play in the economic regeneration of the people.

Without good living good farming is a body without a soul. The organization of better living societies is a noteworthy feature of this movement in the Punjab. The plan is so popular that classes and castes work at it. Since their advent people are trying to reform their ways. Temperance is enjoined, sale of girls forbidden, and expenditure on ceremonies restricted. Non-compliance with the rules passed is attended with the imposition of a fine. The movement is become a moral and educative force of great value to the people. It makes 'the improvident more thrifty, the reckless careful, the drunkard sober, the evil-doer well-conducted and the unlettered capable of using the pen.'

PART III
INDUSTRIES

CHAPTER I

UNEMPLOYMENT AND POVERTY

WITH a rich and varied climate, with large extensive plains watered by big navigable rivers, with a great variety of materials both of Temperate and Torrid Zones, with great mineral wealth, and a large population with varying wants and tastes. India's capacity for production and consumption surpasses any other country in the world. She is rich in iron, coal, copper, lead and manganese. Silica and quartz she has in plenty. In mica she has the sole monopoly. Her sea produce is great, and her forests supply some of the finest varieties of timber such as teak and cedar that combine lightness with durability. In jute and tea she has a natural monopoly. In various parts of the country especially in the Punjab, Bombay, Central and United Provinces, Bengal, Assam, she produces cotton in large quantities

She has a large man power, which with its low standard of life is much cheaper than in any other part of the globe. The average wage of an Indian labourer ranges between Rs. 15/- and Rs. 20/- a month for an eight-hour day.

In the matter of consumption her capacity is infinite. England, Holland, Germany, Austria, America and Japan look to her for the sale of their over-flowing stocks.

The wide and varied nature of our markets has attracted foreign manufacturers. Each country tries to get as large a share in the Indian market as it possibly can.

With high tariff walls and heavy import duties protection is not complete. The fear of a foreign concern getting inside the fold and causing havoc from within is still there. The Government of India may levy heavy import duties on Japanese cloth in the interests of the Indian textile industry. The danger

is by no means warded off. With his usual ingenuity the Jap may steal into the fold. With a large capital, up-to-date plant and high organizing skill he may most securely establish himself in the land, and the rosy dreams of the leading Indian concerns melt in the air. Against all such intrusions provision is to be made if protection is to be a reality. Legislators ought to rise to a sense of duty, and lay safeguards in the best interests of Indian capital, labour and enterprise.

The facilities notwithstanding the land is in an acute state of abject poverty. Unemployment has now become the most dreaded of our ills. In agriculture and industry its horrors are making themselves felt; and education is no exception, for there it is worse still. For clarity unemployment may be classified under three general heads: agricultural, industrial and educational.

Agricultural Short Employment

Agriculture is the basic occupation of the vast majority of the people. Though about 80 per cent. of our population depend on it, the actual workers that are wholly devoted to it are about 10 crores and of this large body some are idle for five months, some for four months but all for at least three. These form 72 per cent. of the actual workers in all other occupations. A huge waste of all man-power, which no country can sustain. Agriculture as we know is uncertain depending as it does on factors outside man's control. So far nothing has been done to keep the agricultural worker profitably employed during this void—no organization, and no agency has undertaken this vital work. Unaided and untutored he is left to his little resources and petty devices.

With the decay of industries and increase in population pressure on land is increasing from year to year. Emigration is beside the point, for in rich countries we are unwelcome, and in poor lands, where no prohibition exists, the labour conditions are most sickening. People that have emigrated are again pouring in, adding to the swollen ranks of the unemployed.

To remedy this state of things industries specially adapted to our land are to be started—industries that are allied with, but by no means antagonistic to agriculture, industries that add something to the uncertain agricultural income during good years, and that stand the farmer in good stead to keep the wolf off the door during bad ones.

Industrial Unemployment

The question of industrial unemployment interests one and all. No industrial country is free from it, and none that aspires to industrial progress can disregard it as of little consequence. The decay and disappearance of Indian industries with the widening of foreign markets brought in chronic unemployment amongst the population that once worked and lived by industrial arts and crafts. The starting of factories, which is looked to as the remedy is no real cure. By absorbing labour it at the most soothes the disease for a time, but presents it in a newer and ghastlier form.

It is really to the credit of the Indian capitalist that unlike his Western brother he struck a new path in the right direction when he started hospitals and provided housing facilities for some at least of the factory population in Bombay, Ahmedabad, Cawnpore and other industrial centres. In Bombay and Nagpur he started schools for workmen's children and maternity benefit schemes for the well-being of the labourer. That he will do so for all time is uncertain. His position is most tempting, and that is sufficient.

Nor was the Imperial Government at Delhi slow to move in the matter. During the last decade it has passed valuable pieces of social legislation such as the Workman's Compensation Act and others. With all that the disease is there. As in the West, strikes and threats of strikes are becoming a common phenomenon in our industrial towns. Trade unions and labour organizations are in the making.

The position of the labourer in the industrial places is far from satisfactory. The monthly earnings of a male labourer in the textile industry range between Rs. 25/- and

Rs. 35/-. 80 per cent. of the income goes to meet the bare wants of life and the remainder to pay indebtedness, for about $\frac{2}{3}$ of the population is in debt.

The factory workers are mostly drawn from rural areas. These have not chosen the towns as their permanent abode, and severed all connection with their village homes and hearths. Theirs is a short stay, a few years at the most, and thereafter they move back to villages. What is needed is the introduction of industries in such a way as to ensure them a regular wage, a happy life and a permanent home; and bring in real democracy in industry in place of the economic oligarchy or plutocracy of the West.

Educated Unemployment

Education is in a worse position than either agriculture or industry. In education of every grade there is an appalling waste of time, talent and money. It combines in it the short unemployment of agriculture and the unemployment of industry. Considering the extent and the intensity the matter is become a live issue of utmost importance to the present generation.

The chief aim originally being to manufacture English-speaking servants for the Government with the present overproduction the question of unemployment has come to the fore, and the wisdom of the policy is in serious doubt. The system itself is defective. It is nothing if not literary. Agriculture, industry, commerce, banking and such other subjects have little place in our universities. More attention is paid to the cultural than to the utilitarian aspect with little scope to meet the stress and storm of life. With the disappearance of industries and the lack of productive means of livelihood English education is looked to as the one means, and in effect has acquired a money value. As the language of the ruling race it carries with it an amount of dignity, pomp and power. The craze for clerical employment is present in almost every one of those that study in schools and colleges. But jobs and clerkships, public or private, are limited in number. They

cannot indefinitely be increased to keep pace with the number of the educated. Even in the case of those that secure a job especially in the lower grades of clerical staff and the education department the remuneration paid is hardly sufficient without other sources of income.

In professions calling forth for a special training and knowledge the position is still worse. The supply is in excess of the demand. The number of doctors and lawyers, for instance, is fast increasing. Many do not want them, and some of these do not want themselves. Members of a noble profession, they maintain a high standard, and live a luxurious life. The number is large, and competition keen. Each tries to emulate the rest and assert himself. Over-work and under-pay are the result. Little work and little pay in some cases, and no work and no pay in others are also bitterly in evidence.

But preference of the depressed classes, of a non-Brahmin to a Brahmin, a Moslem to a Hindu, a Christian to either is not the cause as supposed. Nor it is the cure for unemployment.

Another circumstance that adds to the gravity of the situation is the progress of female education on the very lines on which men are educated ignoring the basic fact that woman has her peculiar problems to solve, and needs a different system of education altogether, competition is now no longer between castes, communities and faiths. It is from within the ranks of each, and against our nearest and dearest ones, our sisters and daughters. Woman is invading every profession not excepting medicine and law. The effect of it is to further intensify the problem of unemployment. Competition against our woman-folk is neither beneficial, nor manly or chivalrous. In the State of Travancore which leads the van in the matter of female education, the number of unemployed female graduates musters strong as those of males in other Provinces. If this is what we mean by progress, we wish we would have none of it at all. It simply adds to the helplessness and bitterness of all with no good to the land either.

During the last decade in Southern India alone three more Universities—the Mysore, the Andhra, the Anamalai or Chidambaram—have sprung into existence annually or more correctly speaking half-yearly adding to the unemployed ranks of the graduates. Here it may pertinently be asked 'Is education an evil? Does not civilisation depend on it? Is it not to be deplored that with all our educational facilities only 8 per cent. of our population can read and write? The proportion of literates in British India is 7.5 and in the presidency it is 8.6. In the progressive states of the West the number is about ten times as great. The number of students in our institutions of University grade is about 1,00,000. If the Indian states are included it may come to 1,10,000. The corresponding figure for Japan is 49,660, for England 51,186, and the United States 9,19,381. When compared to England our number is to be thrice as great.

Education as such we have nothing to say against. But when money value is set education purely of a literary type does not solve the problem. On the other hand it makes unemployment all the keener. There is much of overlapping in our Universities. All of them, the old as well as the new, are of one type with the imparting of literary education as their object. If they are really to be a blessing to the country, each is to specialise in some important branch best suited to the locality in which it is situated. In Great Britain, for instance, "the Liverpool University has specialised in tropical medicine, Leeds in textile, Sheffield in metallurgy, Cambridge in agriculture, Manchester in colour chemistry, and Oxford in classical studies". The like cannot be said of any one of our own. All of them are more or less occupied in milling graduates fit for a clerkship in the Government.

Such of the educationists who think that progress depends on the increase in number of the so-called educated do well to note that whereas education in the West befits the recipient for 'an independent self-supporting life' here it does not. Besides, taking the facilities of employment, say, an Oxonian has in the wide British Empire over which the sun never sets

the number can never be too great, and the supply never in excess of the demand. As Sir Philip Harton, member of the Calcutta University once observed 'our Universities are overcrowded with men, who are not profited either intellectually or materially by their University training.'

The educated youth is fit for drudgery work, but not for industry or commerce.

If the question of educated employment is to be solved, industry and commerce are to receive due consideration at the hands of our educationists. Our schools and colleges are to be modelled in such a way as to afford full facilities for industrial and commercial training, spinning, weaving, dyeing, sericulture, sugar and jaggery manufacture, tanning, pottery, glass-making, pisciculture, preparation and preservation of drugs and medicines, banking, insurance and such others are to find a place in our educational system. Solutions sought outside, do not touch the problem. A small country like Japan which is not bigger than the Province of Bihar and Orissa, has no less than 421 schools and colleges where sericulture is taught, and the number of students annually trained is over 13 lakhs. The result is that though Japan occupies the most disadvantageous position in Asia for silk industry, she supplies 64 per cent. of silk demand of the world.

The educated Indian youth emerges from the high portals of the University 'a bookish theoretic' with high notions of dignity and self-importance, with his mind full of great ambitions and high hopes into the regions of plain practical life a weak, lean figure with his strength and vitality sapped, his originality and initiative stifled to know that what he learnt is not what he wants, and face the stern realities of life. The blame is with the system under which he is educated, but not with him, and as Mr. Ramsay Mac Donald has said, to most men 'University life does more harm than good'.

Because of the false notions of dignity current amongst us we need to know much of the dignity of labour, which is an outstanding feature of the American national life. American students learn to honour work as work. With no discrimination

they do every kind of work. They type, run stationery, wait on tables, wash dishes. Many of them are self-supporting. The spirit of self-help, self-reliance and self-confidence are found among them to an extent unknown elsewhere. They work on farms as day labourers, and pay their fees in kind, and none looks down upon them because they work to earn and learn.

The education they receive is nothing if not practical. Both at home and in school they are made to learn to saw, hammer, make and build from four or five years of age; for with them the best way to learn things is to do them.*

The Beggar Problem

Unemployment long continued leads to destitution, beggary and vagabondage, where the people are meek and well-disposed, but where they are evilly disposed, theft, robbery and crime are inevitable. In India, poor law is unknown; and poor relief is in the hands of private persons and organizations. Unlike in the West no stint attaches to this peculiar profession (for so it is with many in the land). People consider certain trades and professions low and mean, and beneath their caste or rank. But 'begging' stands on a different footing, and on a higher plane. It has a hoary past. Time has sanctified it. Charity has been considered as the greatest of virtues, and the person denying charity is the meanest wretch damned for ever liable to be consigned to the darkest depths of the hellish region. Private charity is inadequate, isolated and indiscriminate. A few pies or little doles of grain do not relieve the want. It undermines self-help, self-reliance, self-respect and self-improvement of the recipient.

There is no criterion, no true standard to judge individual fitness for alms taking. Does everyone that begs deserve it? Do the able-bodied adult, the street singer, the sooth-sayer, the maimed and the disabled beggar come under the same category? In the opinion of many all of them do because begging is the sole test. The force of custom is

*Wide Liberty Footing Number 1929, p. 46. Men and Manners in America—a unique educational system by Miss Sarala Ghosh M.A.,

behind it. It is this that adds to the ranks of professional beggars who think that they have a sort of claim on every one. Leech-like they stick on, and greatly trouble and annoy the public.

The effects are serious and far-reaching. Honest labour is satisfied; vagrancy and idleness are encouraged. In most cases the able-bodied beggar physically fit for labour is better off, and earns more than the honest labourer, who sweats and toils from morn to eve. When a person gets what he wants for mere asking, where is the place for honest work, which involves pain? Begging has become the profession of all those not inclined to work; and due to the lack of industries, every year brings in fresh recruits to its ranks. The mercantile community in general, and the Parsi Community in particular may be said to be an exception.

From an economic point of view begging cannot be justified. On the productivity and the wealth of the country it imposes too severe a strain. In proportion to the number of idlers and beggars, the general productivity of the land and the average income per head dwindles. As we will see woman of high caste and in well-to-do classes does not work to earn to add to or supplement the earnings of the male member. One earns and many eat at his expense in idle indolence. There is in consequence much waste of human labour. If to the number of such, the ever-increasing numbers of beggars and vagabonds is added, the figure is too staggering to think, and the strain too great to bear.

To marry a person at one's own expense is looked upon as a meritorious act. To the married couple it is making hell of earthly home. The progeny of such a union with insufficient facilities for nourishment, education and training are in a worse state than their miserable parents, and are a heavy drag on a progressive society. The man, who directs his charity to this end, is an innocent evil-doer. There is no mincing matters and hiding facts. We must face them boldly and seek a solution. When pressure of population is great, and when land is scarce and shows signs of exhaustion and

beggars swarm like locusts the old ways however laudable do no longer suit the present conditions.

Organized Charity

The need for organized charity as in the West has not felt its course in our country due in large part to the efficient functioning of certain peculiar institutions like the *caste system*, the *joint family* and the *village community*. As the Famine Commission of 1880 has put it, India has or rather had in these institutions "an unwritten Poor Law" based for the most part on custom and convention. The Poor Law exists, and does not. No particular code can we refer to as to its existence. Still in actual practice these are a working force. Now their vitality is lost, their beneficent work is gone; and they are more or less matters of the past so far their usefulness is concerned. New organizations are to take their place. These will have better knowledge of beggar conditions, and provide against real poverty, where and when it is found, and to the extent necessary in each case.

A lot of money is being spent at the *Shradh* ceremonies at the expense of the heirs. Charity as we practise on such occasions relieves a particular need of a kind and for a time. If it is organized and directed towards training the poor incumbent for a trade or calling, it enables him to earn a living without being a drag on society.

Dedication of property to temples, mosques and other religious institutions is another common kind of charity we are familiar with. If the vast sums received by them are usefully spent, we would have paved a long way towards industrial regeneration. There is no better way of spending people's money than utilizing it for the uplift of the people. We are to know that dedication of property for unproductive purposes encourages sloth and idleness.

But institutional charity is yet a new venture just feeling its way. We are just beginning to acquire the knowledge and experience we need. Voluntary associations, wherever they exist, are not yet functioning well. They are manned by a

few enthusiasts with indifferent opportunities, and scant financial support. When wants grow in number and intensity, it is not possible even for the charitably minded rich to give donations unless it be by the practice of close economy in the matter of expenditure.

When work is done by an organization, there would be more of stability, system and continuity than is the case when charity is left in individual hands. Local Boards and Municipalities may take up the matter with due regard to local conditions and needs. Money frittered on isolated or sporadic works for a well here or a road there to humour an interested member or a few voters can be utilized to solve the problem.

Relief Works

Beggars are to be classified under different heads according to their ability to work into the able-bodied and the infirm. The latter are to be sub-divided according as the infirmity is permanent or temporary. Permanently diseased persons fall under the former class, while others, though diseased, come under the latter. A central Investigation Department is to be established for this purpose. The aim, method and application of charity in each case is to be different. Each is to be given a different treatment and different help, the main object being to permanently cure poverty rather than relieve the distress for the time being.

Medical arrangements are to be made for the treatment of the diseased. Lepers are to have separate arrangements in order that they may not spread infection. The other inmates are not to get idle doles at regular intervals. Agriculture, industrial art and crafts are to engage them. They are to realize by practical lessons that what they really want are not doles, but work, honest work that gives them a living, and makes them self-reliant and self-supporting. They are to know for themselves that work brings them food, joy and happiness; that there is great dignity about it; and that a pie earned by production and in the sweat of one's brow is worth a thousand got for nothing.

Is the Country growing Richer or Poorer ?

As the Indian Enquiry Committee under the presidentship of Sir M. Visweswarayya has reported, accurate conclusion is not possible on account of the inadequacy of material. If statistics of agricultural short employment, and industrial and educated unemployment are available, if statistics of women, beggars, idlers and vagabonds that have no work and do none are collected and put together, the resultant figure would unquestionably head the list of the unemployment in the world, and the staggering figures of unemployment in Europe and America pale into insignificance. Out of the total population the number of unemployed is 8 per cent. in Germany, 10 per cent. in the United States, and 5 per cent. in the United Kingdom while the figures for India is 23 per cent. The question of unemployment and how best to tackle it is the topic of the day in those lands. In India though many feel the pinch of it, no action has been taken. As Sir M. Visweswarayya has said in his recent address to the University Institute at Bangalore, the situation is developing alarmingly every day though the Official World has not taken notice of it.

Average national income is defined as 'the net sum-total of things and services rendered'. The definition includes goods and services that are exchanged or are capable of being exchanged, while goods produced for one's own consumption and services rendered free are excluded therefrom. The services of the mother, the wife and the son with no expectancy of remuneration, services rendered mutually by doctors, lawyers, musicians, as well customary services that society enjoins on the members of a family, the caste, and the class do not fall within the definition.

Some take 'goods' only into account and leave out services, while others narrow the definition further by excluding goods needed for the sustenance of workers. Estimates of average per head are numerous and conflicting. The method employed in each case are different and the results

These apart, average individual income is not the true criterion of the general poverty or richness of a people. It is to be considered in the light of the general price level in the country before we can decide one way or the other. The real income it is capable of yielding in the form of things purchased can best be calculated when we know the purchasing power of money, the rupee in our case, at a particular period. Under-employment in the case of many and unemployment in the case of others lead to low incomes, and lower the purchasing power. When averages are struck, the average income per head shows a higher figure; but when the purchasing power of the money and the standard of living at the different periods is taken into consideration, we know that the higher average is not in reality a higher income. The following table may make matters clear.

Year.	Average income per head in British India.	Author.	Index number of prices.
1.	2.	3.	4.
1871.	20.	Dadabhai Naoroje.	93.
1881.	*27.	Sir David Barbour.	*100.
1891.	Not known.	" "	110.
1901.	30.	Lord Curzon.	120.
1911.	50.	Mr. Findlay Shirras	140.
1921.	"74.	Mr. K. J. Khambatta.	378.

Considering the average income and the value of general price level for the last 40 years under discussion, we find that the money income has increased from Rs 27/- in 1881 to Rs. 74/- in 1921 or in proportion of $\left(\frac{74 \times 100}{27 \times 1}\right)$ 100 to 274, whereas during the period the rupee prices have shot up from 100 to 378. We have Rs. 274 in 1921 as against the required sum

*Vide the Problem of Unemployment in India,

Mr. V P. Choudary B A., B. Com. (Lon) A S A A, A.I.B., (Eng.)

Indian Review 1932, Dec. p. 861.

of Rs. 378.* In other words, we are poorer in 1921 than 40 years back by $1 - \frac{374}{378} = \frac{4}{378}$ or about $\frac{1}{94}$. During the last decade the position has grown far worse. Population has increased, the standard of living has risen, and unemployment has become keener. Commodity prices have fallen, and exports dwindled. The country is depleted of currency, and money is the cry everywhere. Never have we been so poor as we are today.

Poverty and Standard of Life.

The mode of living of high caste men has changed. With the increased contact of the West, Western ideas of living are being copied. Their personal comforts and conveniences have increased. Further, the training of children in many cases by indulgent parents has unfortunate results. Children are brought up in a high style—higher than the one the parents are used to or can really afford. With the earning member the income either ends or dwindles away, but the luxurious habits and the high style once formed remain to the last. Wealth is wasted. Idleness, profligacy, indulgence, and lack of industry and intelligence would ere long be their proud possession.

When we liken our living to European Style we often miss one fundamental fact. In our case opportunities are few and uncertain; the son seldom rises to the position of the father, and the need to make provision for wife or children is always there while the Westerner is free from the bother as in the national government and the empire he has opportunities for industry and employment.

Our social fabric, barring, of course, the working classes, is so constituted that when one earns many eat. Woman, who in the case of working classes contributes something to the father or the husband, is in the case of others a mere dependant; and what is more, with her refined tastes of life a great financial strain on the earning member. The economic drag is no less marked in the case of those agricultural

* Modern Review 1923. August.

Is India getting richer or poorer?

classes whose women observe *purdah* and do not work. These are in most cases much worse off than their neighbours, whose women work in the open fields or carry on supervision side by side with their male members.

In view of the progress of civilization it is not unreasonable to set a limit to the standard of living which is ever on the rising curve. Our wants are fast increasing, but the income we get is not keeping pace with the wants. So we must either minimize them or else live in a state of artificial poverty, no matter how great the income. If the good things of the earth are to be assured to one and all, if exploitation is to cease, and peace to prevail, there is no straighter course.



CHAPTER II

THE CAUSES FOR OUR ECONOMIC BACKWARDNESS

Hindu Religion

CHRISTIAN critics attribute the economic backwardness of India to Hinduism. According to them it stifles individual ambition, deprecates accumulation and encourages inaction. The infallible testimony of history is otherwise. In the centuries long past India evolved a civilization, which is spiritual as well as materialistic. Her arts, industries and handicrafts attained a high degree of excellence. Her products were in great demand in the then civilized countries of the world. She had a navy of her own. Her bold and learned sons crossed the seas in quest of wealth, established colonies in distant lands, and carried on cultural conquest. The material side of her civilization developed to such an extent that "the wealth of India" was sung in distant climes. Hinduism is elastic and comprehensive. It has much that suits all tastes and different temperaments. From the highest spiritualist down to the man that has not passed the stage of nature and demon worship, every one finds much to learn, ponder over and profit by.

It is the growth, the slow evolution through the ages. It assigns to the married man, *Grihasta* as high a place, if not higher, as to the ascetic, the *Sanyasin* that retires from the world and prefers action to inaction, *karma* to no-*karma*. It looks upon money as a clog to real salvation, and holds up renunciation as the ideal. But in the case of the vast majority, the married and the business man, it is a thing to be coveted, a means to an end, a higher and nobler one, but not an end in itself. It prescribes the modes of earning and the ways of spending.

The highest tenets are an ideal, and so wont to remain. A few spiritual souls may aspire to, and well nigh realize them. But what of the common folk? The fact that Jesus taught

that one should not possess more than what barely suffices does not mean that all Christians are up to the mark or that no accumulations are made. On the other hand, history bears testimony to the fact of awful accumulations made by persons professing the faith of the Prophet at the expense of suffering humanity.

If we are a nation of idle philosophers, how to reconcile the statement with the stern facts of history? Limits of space and sense of proportion forbid us from entering into a detailed account of India's sea-borne trade and material wealth. Suffice it to say that while India recognised the spiritual value of things, she did not forget the material side. Underneath everything Indian there is a deep under current of morality and righteousness. While the civilization of ancient Hellas was intellectual and of Modern Europe materiatic, that of India is spiritual. It has a soul of its own. So notwithstanding internal feuds and foreign invasions, the devastations of foreign invader and the slow ravages of time, it lives and moves and is a force that counts while Greek civilization is a mere matter of history, and of modern Europe is tottering in the balance.

The Caste System

From the economic standpoint it may be said to have its basis in the division of labour. It came into existence to serve a purpose. Under its protecting wings the artisan and the draftsman preserve their arts and crafts from outside competition. The skill they inherit through the ages makes them real masters in the field able to withstand the onslaughts of mechanistic production. It performs much the same functions which Trade Guilds did in mediaeval Europe. Through caste Panchayats it regulates trade and industry, and settles disputes amongst the members of its class.

If it preserves the hereditary skill on one hand, it on the other excludes the inflow of any from outside. Production being in the hands of man, the quantity produced is very much limited. It does not admit of competition, and has no place for specialization leading to large scale production.

The system has now lost its early rigidity so that people irrespective of caste may seek work where and when they find it, and is no impediment to economic growth. Agriculture, trade and commerce are now no longer confined to this or that caste. All, irrespective of caste, take to it. No stigma attaches to the choice of any profession except when it happens to be one which society looks down as mean such as butchery, tanning, etc.

Inter-dining and inter-marriage are the two citadels of the caste system. But social intercourse and economic progress not impeded by them. In villages amongst persons of different castes utmost cordiality prevails. They live in amity and friendliness, and address one another as brother, sister, uncle and son, except in cases where notions of false dignity, self-importance, and self-interest have created a chasm between the classes and the masses. Persons of a caste do not grudge if a high caste man does not mess with them, but feel greatly offended if any body of a lower caste sits to dine with them or is served earlier at any function. The restrictions imposed on dining and marriage are not from any notions of superiority, but to check cosmopolitan competition.

But the reformer, who is not content with anything short of its total abolition, forgets in his zeal that there is not a country in the world where there is no caste system in one form or other. If caste based on birth is done away with, caste based on wealth in a worse and more loathsome form is sure to step in and reign supreme as it has in the Western world. It is driving Satan with Bebsibub. The best thing to do is to remove its venomous stings, the rights and privileges that pertain to caste, and offer equality of opportunity to all so that none can plead for his self the mere accident of birth. Let caste exist, none is a loser for that.

The Joint Family System

It came into existence at some stage of social evolution and played its part fairly well. It supplied food and raiment to every member of the Hindu family, protected the infirm

and the aged, and looked after the education and training of the young. It fulfilled some of the duties, which the state is called upon to undertake in the West, by passing poor laws and other pieces of legislation for social and economic welfare.

But great changes have come about in men's mind with the currency of Western ideals. The old ideas of "each for the family" have given place to the new that "each is for himself". The age we live in is one of extreme individualism. Why should one man toil and earn in order that the rest may eat, and live in comfort? The system of jointness kills the incentive to work. Why should a member toil and suffer when he is sure of being provided for by the father, brother or uncle? He can be a drone and yet none the poorer for that. From another point it bears heavily on the earning member. It kills ambition, and the incentive to strenuous labour. Why should one man trouble himself, when others having neither part nor lot, come in only to participate in the fruits of his labour. It encourages sloth and idleness, and is an enemy to efficiency.

It leaves little scope for vast accumulations, and the result is that sufficient capital would not be forthcoming for large-scale production. The reasons for the insufficiency of capital are not so much due to the joint family system as to the absence of facilities to earn and save. If it does not create a few millionaires and glaring inequalities in wealth, it on the other hand has ensured a large and powerful middle class which is the main stay of the country, the absence of which in the West is undermining the very foundations of the Socio-economic fabric.

The educated public opinion has embodied itself in the passing of an act* that the earnings of an undivided member are his own, though he receives his education at the expense of the family and to its detriment. It cuts at the very root of the joint family system.

When we come to the Indian farmer we face with different facts altogether. The evils of the joint family as we see them in the higher castes are conspicuous by their absence.

* The Gains of Learning Act of 1929.

In the case of the agriculturist it is no longer a question of one earning and others eating at his expense. Young and old, male and female, all work each according to his or her physical fitness and capacity, and contribute his or her little mite to the joint stock. There is no question of idleness if there is work.

Besides the two classes of sonship, *Aurasa* and *Dattaka* known to Hindu Law, a third known as the *Illotem* son-in-lawship is recognized by custom amongst the agricultural classes in parts of the Madras Presidency. On partition the *Illotem* son-in-law is entitled to a share equal to the natural-born, and the adopted sons. The affiliation of a new member is really adding to the productive capacity of the family by joint labour, but never a hardship to the family.

The process of disruption has already begun. There is no mistaking it. We must make it broad-based with enlarged scope and activity by co-operative and insurance methods with society as its basis. In place of the new too selfish motto of "each for himself" the salutary principles of "each for all and all for each" are to be inculcated through co-operation and insurance.

Marriages

Amongst the wasteful ways of spending money, marriages rank high. They have brought many a family to the verge of financial ruin and bankruptcy. The force of custom and convention and the desire to emulate relatives and friends in costly grandeur and vain ostentation involve the waste of every pie saved and worse still, running into debt.

To start with, the exorbitant marriage presents are much to be deplored. The parents of the bride in consideration of a rich or an educated youth marrying their girl have to pay a high price, not to mention of other presents to his relatives, male and female, of whom there would be quite a regiment especially on marriage occasions. The practice of setting a price on the bride, as if she were a good marketable chattel is far worse. The custom, convention, or whatever it is bears hard on one or other of the parties—the rich receiving a reward

for being rich of course, the poor paying a fine for being poor of course for securing the hand of a girl in marriage To be rich is to reap a reward; to be poor is to pay a fine

This state of things is in the main due to the violation of the laws of Nature. Though the birth rate of male and female children is nearly the same in our country man frustrates God's plan by marrying more than one woman either at the same time or one after the other. On the side of woman, the absence of a like licence amongst many of our castes and communities unduly restricts the number of women available for marriage.

The restrictions on grounds of *Gotra*, *Pravara*, and nearness of blood along with the prohibition inside one's sub or inter-sub-caste further narrows the field of selection to little groups To put it in economic terminology the supply thus being restricted, the demand for suitable brides or bridegrooms as the case may be rises. The parent of a grown-up girl of goodly looks or of a rich, promising lad is in the position of a quasi-monopolist. He names his own price of the thing with him, for from the point of the bargaining party it is no other; and the other party cannot let the want go unfulfilled as marriage is a sacrament necessary in the case of man and compulsory in the case of woman So it must go in for the best at the value set on it or the next best for something less

As to the duration of the ceremony it is to be noted that it extends in its costly fashion to five or six days though practically it covers a longer time, a fortnight at the least. Though the customs and marriage laws of the Moslems are different from those of the Hindus, in point of reckless expenditure and extravagance on marriage occasions they outbeat their Hindu brethren.

The lower middle and the hardy working classes, who by long thrift, frugality, industry and prudence make a fortune, fritter it all away in a few days by a blind copying of the ways of the higher middle class. The desire to adopt the cumbrous and expensive fine-day-marriage ritual of the Brahmins

is highly to be deprecated. Not to speak of the prolonged worry and anxiety, the expense it involves is enormous. Religion does not enjoin a five or six-day period except when consummation is immediately to follow marriage as under the Aryan form of marriage. Marriage is complete on the first day with the *Saptapadi* ceremony, and the subsequent days, though unnecessary in the case of child marriages, are a relic of the old times, a matter for mere revelry and enjoyment, and insisted on by ignorant, selfish and greedy priests.

The Jewel Mania

Woman is more prone to the desire of Jewel-wearing than man perhaps because she is vainer than the other. With the average Indian woman it is a passion, a deep and consuming one, the end and aim of happy earthly existence. As a critic has humourously put it "to an Indian his wife is the Savings Bank on whom he hangs his savings". Significant words are these! To an Indian his wife is his Savings Bank on whom he deposits his savings. He does it at a loss because this kind of deposit is non-interest-bearing, and at a discount because of the charges of making and depreciation by wear and tear.

It is not for the mere love of it that jewels are worn in our land. When fortune favours and everything goes the right way, jewels confer a social status among friends and relatives and are a means of securing good matches for the younger members of the family.

With the merchant and the businessman, they are a means of enhancing his credit and borrowing capacity. With the farmer they are a family reserve—he can at any time draw upon by sale or pawn either to meet the expenses of agriculture or to pay off an existing debt. With most of the people they are a provision made against old age, sickness, famine or a worse morrow.

During the recent economic depression most of the Indians met their obligations by, and practically lived upon this "dead Capital". Large quantities of gold from rural areas

flowed to trading centres for foreign export to relieve the economic distress that swept over the land. It is a proof positive that the Indians value gold as a store of value, and as a means to an end, but not Midas-like actuated by the mere craze for it.

It is said that so long the evil of jewel-wearing continues there is no rearing of banking institutions on our soil. Put the other way, and there would be a better understanding of Indian conditions. We convert wealth into gold because we have no secure and profitable avenues of investment. The truth is missed because the effect is put for the cause.

Mere fault-finding does not make us any the better for it or carry us a whit farther than where we are. Right diagnosis and proper remedy are what we want to set matters right. A central banking organization commanding the respect and the confidence of the people is the vital need of the land. With proper education and training woman can be persuaded to convert her superfluous ornaments into gold certificates, and there would be enough of moving capital for improving every national concern now withering and drooping for want of capital and making ours a gold standard country. It would be a glorious day indeed, when every ounce of the yellow metal that the woman voluntarily discards forges a link in the golden necklace of the Motherland.

The Drink Evil

Drink is the parent of the four Ds.—debt, disease, death and degeneracy. It eats into the vitals of the drunkard, saps his moral strength, weakens the powers of self-control, loosens the bonds of family love and happiness, and makes him a foe to his self and his dearest ones. It brings in woeful habits, wastes wealth, hails pauperism, and makes the man a mere economic wreck with death for his reward and degeneracy as the rich heritage

Wine is the prime mover of human crime. It rouses passions, and makes a brute of man when the fit is on. With prohibition there would be less of crime, and less need for the

police and criminal departments. The saving effected would far out-weigh the loss incurred for the prevention, the detection and punishment of crime.

For a total wiping out of the evil no country is so propitious as our own. The social and religious sentiments of the people are inimical to it. The Moslem and the Hindu look upon it with abhorrence, and as a sin. With the rich and the high class people it has come to be a matter of imitation of Western ways. The lower classes believe that it relieves excessive bodily strain. It is not a curative, not one that recoups, but one that dulls the pains and wastes the body and substance.

The fear is that its abolition would encourage illicit trade. Secret dealing would be rife, and respect for law and order there would be none, evasion would become the rule and not the exception."

It is hard to appreciate this line of argument. Are we to think that a drunkard respects law and order more than a sober citizen, and that he would have greater fear or higher scruples about its evasion ?

The Government has undertaken temperance work. But the work so far done by its Committees and Boards has not borne much fruit. The state, the economist, the social and religious reformer that look to economic uplift of the country and the improvement and regeneration of the depressed classes cannot ignore it as of little consequence because it is a vice more common with the depressed classes than with any other.

But unluckily as it is, the allocation of the Excise revenue to the Provincial Governments under the White Paper Scheme is a handicap in the way of temperance reform. If the Excise Department is in the hands of the Central Government as the Rev. J. F. Edwards contends* there would be a better chance of getting it controlled in the interests of morality, law and order, public health, individual and national economy. But

*The White Paper and Temperance.
Mr. Frederick Crabb.

how it affects the State revenue will be discussed when we come to public finance.

Litigation

"The three crushing evils that India today groans under are landlordism, usury and litigation. Of these three litigation is to be more deplored; for through it our men of light and learning are leading a vampire life falling on the fruits of honest labour of a famished peasantry, who in civilized countries are immune from every burden." While the best intellects of the civilized world are trying their level best to find work for the unemployed millions and increase national wealth, in this unfortunate land, however, the intellectual and the moneyed classes are busy in the spoliation of those who produce the prime necessities from the soil.

Heavy expense and inordinate delay are the crying evils of our legal system. Justice is a rare commodity, a luxury of life not within the reach of all. If a person wants, he would have it at a dear cost often extending to his worldly all. Litigation means money—money at every step from the moment the case is filed till it reaches finality, which often extends beyond the life time of the suitors. And 'the real woes of the litigant in British India', to quote the memorable words of Their Lordships of the Judicial Committee 'begin when he gets a decree in his favour'. The real difficulty is felt when it comes to executing and realizing the fruits of the decree.

As in the case of marriages litigation has been the ruin of many a family. But the worst of it is that it brings in estrangement and discord even amongst the nearest and dearest relatives and friends, and leaves behind a trail of hate and bitterness that lasts till the end of days.

The remedy is to revive the old corporate life. The village Panchayat is to be reformed so as to suit the changed conditions of Indian life. The Panchayat, wherever it exists, is not feeling its power. It consists of a few persons who have little intelligence and inadequate powers with a sweeping right

of appeal against their acts and decisions on flimsy grounds. If it is meant to be a power and force, the membership is to extend to a tolerably large number, each party to an action is to have the right to select one or two in whom it has confidence. The pecuniary jurisdiction is to be enlarged. Procedure is to be simplified, and case law eliminated. The right of appeal is to be limited to cases of obvious oppression or corruption or when the matter requires expert legal knowledge. In all other cases it is to be final.

With the increase in its power and dignity, and with the assurance of judicial independence good and intelligent persons, the retired official and the rich landlord who have cultivated a bias to town life, may be induced to return once again to villages. Panchayats may then function well, and the plea that the power leads to abuse would have no force at all.

The establishment of circuiting judges from amongst the ranks of the practising pleaders to decide on important matters or complicated questions commends itself both by the simplicity and the economy of the scheme, and fits in well with Indian conditions. The poor client, instead of going far at too great an expense and trouble, would get justice done in his place without much delay, with little expense and no loss of labour.

Sanitation

Good living is essential for sound economic life. Where conditions are insanitary and unwholesome, there would be great economic waste of labour. When a locality is infected with malaria or visited by an epidemic, there would be woeful waste of man-power, a loss to the individual employer, and worker for the daily wage. The infected person suffers because he gets nothing during the period of illness, and has to live upon his past earnings, if he has any; the employer because he has to pay at a higher rate when the number of workers falls due to the disease or the epidemic. On account

of sickness and death the loss which the country annually sustains is estimated at 210 crores of rupees.*

Of this Rs. 1,07,00,000 is the loss incurred by disease amongst the labouring population which numbers about 16,00,000. By proper precautions against sickness, which is mostly preventible, this enormous loss can largely be minimized. Modern Science has shown that epidemics and diseases are not the results of human sin or divine wrath, that man is no longer the helpless being he once considered himself to be, and that by proper sanitation and good living he can bring disease well within control.

The remedy for this lies in the improvement of sanitary conditions. Sanitation has not yet received the consideration it deserves at the hands of the State and the local bodies concerned. Low roofed, with few small windows or with none at all, shutting out light and air, most of the houses in our villages are mere hovels not deserving the name of a house. Besides, the houses being mostly of thatch and in close proximity to one another, they are liable to frequent fires. Though statistics are not available, the annual loss on this score is enormous. To minimize the loss and the frequency of occurrence there should be a change in the plan and construction of houses. Though a change to build better has come about, the general poverty is an impediment, and people are unable to avail themselves of the facilities, which the Cooperative Building Societies offer.

The surroundings of the dwelling places are most filthy and unclean. Heaps of dust and rubbish are thrown into pits and pools near-by to rot and putrefy. The habit of easing in close proximity to houses is common in most of the villages. This often results in frequent visitation of epidemics, which carry hundreds of people. The pits and pools are the breeding centres of the mosquito during the rainy season. It is not also uncommon with most of the villagers to have their cattle, sheep and goats under their very roofs when rains pour in.

*Mr Bransby Williams, the Chief Irrigation Officer of Bengal, calculates that one death here is equivalent to 180 weeks of sickness in England.

These practices are very injurious from a health point of view. But for the hot sun and the dry weather that prevent putrefaction and the emission of bad odour during the greater part of the year and the village dog and the pig that do the scavenging work it is hard to imagine how deplorable the state of things would be. But no villager ever thinks of seriously meddling with this state of things either because familiarity renders them common-place or because he fears popular disapprobation. Pure water is no less indispensable for good health than pure air. When water is impure, diseases increase and spread like wild fire taking a heavy human toll. Want of pure water is the need of most of our villages. Tanks and wells constructed anew where there are none, and improved when the condition of existing ones is not satisfactory will make up the long-felt want. The Local Boards are to extend help by furnishing trained men and money and the Committee of Sanitation is to do the rest in the interests of the public.

The Railway

In the march of modern civilization the Railway may be said to have played an important part. It is the proud possession of every progressive state. But for it and the steamship free trade and world competition would have been empty phrases. The Railway has raised the standard of human comfort. It has enabled man to part with the overabundance of the thing he has in return for a large variety of articles he has not by easy and rapid transport.

In India we have 39,712 miles of railroads, not a high figure considering the vastness of the country. Of this 35,000 miles have been built up with foreign capital on which the Indian tax-payer has for decades been paying interest. Thickly populated territories long awaiting development there are many. But the construction of new lines involves heavy expense, and is not always easy. In an agricultural country depending on precarious rainfall opening of channels serves a double purpose with lesser cost. Where water facilities lack

opening of new roads to carry on traffic by country carts and buses may as in the United States serve as feeders to railroads.

The signal service of the Railway to India is that it has wiped out social, economic and provincial barriers, and rendered her a "mere geographical expression" with different races of divergent interests politically one. It is by the way. But when we come to industrial progress a different tale is to tell. By flooding the Indian Market with the implements of husbandry, hitherto locally made, it has driven the skilled artisan from the field.

In matters of freight the Railway policy is inequitous. Foreign importers enjoy advantages denied to local producers. A unit of iron imported from Antwerp or Brussels to any Indian port costs Rs. 10/- while the same quantity from Jamshedpur to Nagpur is charged Rs. 13/-. The freight charged on the marble from Jeypore to Madras far exceeds the freight on the same quantity exported from Italy to India. In the case of coal an inland centre like Ahmedabad finds it to her profit to import coal all the way from Great Britain or South Africa rather than purchase it from the neighbouring Bihar coal fields. A bale of cloth consigned from Lancashire to Tuticorn, Bombay, or Madras bears the same freight, which is far less than one from Ahmedabad to Hyderabad (Sind) or from any producing centre to any inland town. The wood needed for the manufacture of pencils is not able to find its way from the Himalayan ranges into the factories of Bengal and Madras, while cedar and sugar-pine from America and East Africa are available at cheaper rates in our markets because of our prohibitive Railway Tariffs and the better transport facilities which others enjoy.

Exports form no exception. It costs more to send cotton from Tirupur to Delhi than to export it from the same centre to Lancashire. The Punjab exports a large portion of her wheat produce to Europe, while Bengal and Madras import largely from America or Australia. The cheapness of foreign wheat cannot be the reason. If so, the Australian and

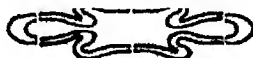
the American wheat would have captured the European market. To benefit foreign shippers the Railway authorities have encouraged the transport to Karachi rather than to Calcutta or Madras. The transport of wheat soon after harvest by the needy farmer makes food unavailing to many people even in the locality that yields a rich harvest. Crops or no crops, people always feel the pinch of hunger and the dearth of food.

The construction of different Railway lines with different widths leads to frequent transshipments before the goods reach the destination. Delay, deterioration, destruction and theft causing much loss and damage to the native dealer are the usual consequences. Under the circumstances litigation between the Railway company and the trader concerned is unavoidable.

If matters are to improve, the different companies are to amalgamate into one public body which has the interest of the country for its goal. In dealing with the trust movement we have seen that the tendency now is for the several states to join in internationalizing the railway, the telegraph and the Post Office for the common-weal of all. The management and control of the existing lines can best be taken up by the State. The Railway does not admit of competition. Reduplication of lines is a sheer waste of energy and money with no corresponding benefit to any one in the land. Then we no more hear the present-day waste, ills and anomalies. With uniform railway lines all through, the waste, delay and loss on account of different lines can be avoided. By a proper regulation of the freights on a fair uniform basis the State can benefit the internal producer and the consumer. But the enhancement of rates on piece-goods, sugar, tobacco and other materials acts most unfavourably on our trade in general and infant industries in particular. Goods are to be classified into those that are essential for the industries in the land and those that are not for special treatment in respect of freights.

Besides, the nationalization of railway service makes 33 per cent. of profits available to the Indians thereby solving in part the educated unemployment.

With no responsibility and no sympathy with the internal industrial development, the end and aim of foreign companies is to make as much as possible by way of heavy freights. Again, assured of a five per cent. profit by the Indian Government the Railway Companies pay little attention to the proper construction and the up-keep of the lines. With no adequate out-lets for rain-water with small streams almost blocked up, with deep swamps and pools on either side, lands, which were once fertile, are now desolate tracts infected with malarial and other diseases. The frequent occurrence of breaches in the lines throughout the land bespeaks of the want of engineering skill and constructive genius. What do the companies mind so long they are sure of their five per cent. profit under all circumstances at the expense of the poor tax payer ?



CHAPTER III

THE CLAIMS OF FREE TRADE, PROTECTION AND IMPERIAL PREFERENCE

TRADE is the inevitable outcome of the economic evolution of man. It arises between different individuals, different parts of a country, and different countries because of the differences in the productive capacity of each. Of two persons, who can both make shoes and tables, it is profitable that the one, who can make more shoes, should take to shoe-making, while the other, that has greater efficiency in making tables, should be a carpenter. Such a division of labour is natural and inevitable. In like manner though England can produce both cloth and wheat, she finds it profitable to produce the former because of the advantages she enjoys in the production of the one over the other.

Free trade is an accompaniment of capitalistic production by machine power. Things are no longer made for a local or national market. The Railway, the Steam-ship, and the gold standard have increased the facilities for foreign trade.

The magnificent start and the scientific discoveries enabled England to become "the workshop of the world" and increase the distance between herself and her rivals by the Law of Increasing Returns. The enormous commercial progress she made in the later half of the nineteenth century holds her as an example that has risen to the heights of material wealth by free trade.

History does not lack in instances of countries that have built their fortune and financial stability by following a policy of protection. The fact that other nations have refused to follow England is an indication that the track chalked out by her might not after all be the best. From 1870 onwards free trade has been on the wane. The methods adopted by Alexander Hamilton of the United States and Prince Bismark

of Germany to increase national resources and solidarity by systematic protective tariffs could not be flouted.

Advocates of free trade say that it offers to the consumer largest variety of goods at the lowest price. As we have seen free competition taxes the ingenuity of the manufacturer to select and make use of inferior stuff so as to sell at a low price by a reduction in the cost. They further maintain that under free trade the resources of a country would be put to the best and most economic use. As against this it is to be noted that it leads to speedy exhaustion of the natural resources, which are the strength and the reserve of a country. They compare figures of the unemployed in countries that follow the policy of protection such as Germany and the United States with those of England, and contend that free trade solves the question of unemployment, while the other does not. Free trade is no remedy for unemployment. On the other hand, it intensifies it with the increased dependency on uncertain foreign markets. The question is no less keen in England than in Germany or the United States. Might be the English figures a little less; but the disease is there.

They again point out that international trade is not a mere economic phenomenon, that constitutional and colonial systems are adjusted to economic needs, that it heals political ambitions and national rivalries, and promotes friendliness among nations. The Frenchman and the Jap have been friendly to England. But did they at any time out of friendship concede anything to the English trader? The nationalistic wars during the nineteenth and the early years of the twentieth centuries are a sad commentary on the greed of nations for commercial and colonial expansion.

Free intercourse, they argue, between country and country leads to greater economic dependence which, in turn, leads to international amity that best guarantees world peace. Economic internationalism is no doubt a strong working force, but there is a still stronger and more intense force working the opposite direction—the force of nationalism which subordinates all other interests to itself. With the Great War

the surging tide of nationality is fast spreading in every part of the globe. The hope of world peace lies in the agreement and cooperation of nations, not in their breakdown as the critics want us to believe.

The upholders of protection argue that free competition enables the coloured races to undersell the White man, and cut him down to a lower standard of comfort more or less approximating his own. Self preservation is at the bottom of the immigration laws, conditions and policies of the advanced states.

They contend that the over-crowding of towns, and the insanitary town life are in no small measure due to free trade. The fear is that Municipal and Corporate bodies may prove unequal to cope with the needs of the town-dwellers, social or otherwise at no distant future. But for free trade the several schemes of socialism and the various places of social legislation would be unnecessary. The arrangement that free intercourse enables each State to obtain the products it cannot grow, and manufacture goods in the production of which it enjoys special facilities has lost all the force now that machinery is transported to every part of the world, and has equalized facilities for industrial production.

The free trader says that accumulation of gold and silver is not an end in itself. What is wealth for, if it does not add to the material comfort of a people? One country buys commodities from another with the object, though not express, of selling its own goods in the other. Protection provokes protection. If a country puts restrictions on the imports of a State, it is not unnatural that its articles would fare no better in the other. If for any reason exports are greater than imports, the result is an inflow of gold or silver. Due to the law of supply and demand the increase in the quantity of the metals reacts on prices. With the rise in prices the tide turns, and imports increase and exports dwindle till normal conditions are restored. There may not in the long run be an excess of exports or imports over the other. We know for a fact, that the balance of trade has for decades

been in favour of India. But for this she would not have been able to meet her foreign obligations. Moreover, there is no gainsaying the truth that America and France have in recent times built up untold fortunes by a close adherence to a policy of protection. Even the free trading nations do not always follow an out-and-out free trade policy. They follow free trade in those industries that would secure large profits. Protection is maintained in others when they are not sure of their position. While on the part of England there is or to be accurate was no restriction of over-seas trade being carried on in ships of any nationality, France, America and Japan insist on their goods being carried in their own vessels.

Protection shields a country from the evils of dumping—the practice of selling a commodity at a price lower than the cost of production in foreign markets with a view to kill competition and capture the market. To kill Indian Sugar industry and capture the market, Germany sold her beet-root sugar at a lower price than indigenous production. She made up the loss with the help of state aids and bounties, and by artificially keeping up the price at home.

Protection does away to an extent with the uncertainties and speculations of a world market. The danger in a world market is that a flood, a famine, a war or a change in taste or fashion in some remote part of the world, which is hard to gauge, has its repercussions on the whole economic fabric. The failure of the cotton crop in America or Egypt or the low purchasing power of the Indians would adversely react on Lancashire. The manufacturer, the labourer, the trader and the consumer are affected each in his way. Home market offers greater certainty to production and minimizes the evils.

It is a favourite argument with the American economists that a high standard of comfort is assured to the labouring population when there is protection. Free trade, they say, would out-beat indigenous industries because of cheapness of labour in England, Germany and Japan. The fallacy of it is that it assumes that high wages and high cost of production, and low wages and low cost of production go together. As

a matter of fact they ill accord and ill go together. Large production depends on the efficiency of labour, and need not involve high cost. The American labourer receives higher technical education and enjoys greater freedom than persons of his class in Europe. The Indian markets are flooded with American goods because, though the American manufacturer pays high wages, the total cost of production is much lower than in India with its lowest wage rate. The fears of American economists that if there is free trade, foreigners would capture their markets is baseless. Nor can it be said that high wages depend on protection. The cause of England paying more to her labourers than France or Germany where protection prevails leaves no force in the argument. High wages depend on natural resources, the use of scientific methods and the efficiency of labour, not on the absence of free trade.

Behind high protective walls lies the hope of industrial regeneration of the backward countries. There is little force in the contention of the free trader that some lands are better adapted to produce certain things than others. With its levelling and equalizing tendencies science has largely rendered nugatory obstacles which were once looked upon as unsurmountable. It knows no geographical limits and racial distinctions ; in its out-look it is most democratic. It is said that in a country like ours with crude and conservative methods and inefficient labour protection increases the price of things, and inflicts a great hardship on the consumer. The high prices paid do not in reality bear hard on the consumer if we take into account the cardinal fact that protection increases our opportunities for work, and puts us in possession of wealth wherewith to purchase all we want. But when there is no work, no employment, no money and people are poor, cheapness does not count at all. Again, the point that a country cannot be self-contained and produce all its wants, and consume all it produces does not hold good however in the case of the United States and the great Indian sub-continent.

In the interests of a nation the resources of a country should not indifferently be worked, wasted, much less

exhausted. To secure national resources and maintain the strength of a nation protection is indispensable. No doubt free trade brings in large immediate gains, but it exhausts the resources and fertility of a country ending in ultimate impoverishment. Free trade coupled with intense cultivation has well-nigh dragged Indian soil to exhaustion. The principle that every one knows and cares for his interests, and that each left to himself works for his good and that of his country is sound in theory but otherwise in practice. If matters are left to individual initiative, the permanent fertility of the soil would be impaired as everyone extracts as much as possible from the soil.

Free trade leads to one-sided development which is disastrous from an economic and political point of view. Specialization, which free trade favours, is not a sign of good health. It entails too much strain of one limb at the expense of the rest. When practised on a nation-wide scale its bad effects are more telling. For offensive and defensive purposes, a country adhering to protection is in a stronger position than one that follows a policy of *laissez faire*. In the matter of ship-building England enjoys more facilities than the United States. If a war breaks out between the two countries, which God forbid, does not America find herself in a helpless condition? In the interests of the nation is it not better that America should build her own navy though this may entail a greater expense? In the matter of munitions of War, Germany enjoys better facilities for production than any other nation, and sells them at a cheaper rate. Is it not the height of folly to look to her for supplies in a time of war, more so when she happens to be the aggressor?

For her food supplies England depends upon foreign countries—Canada, the United States, Argentina and India. If her enemy is able to paralyse her mastery of the seas, would not England be starved to submission in a short time, a few weeks or months at the most? Rather than face such a disaster would it not be better to have protection though at a cost? The policy of national self-sufficiency, the aim of every

Western state is due more to the fear of a coming war than to the desire to solve unemployment and secure balanced economic condition.

Under free trade towns grow like mush-rooms, and unhealthy town life tells on the healthy growth of the people. For military purposes persons drawn from towns are less fit than those reared in the free air of country-side. For a healthy diverse development the village no less than the town has something to offer. But one-sided development of a particular kind to the exclusion of the rest is to be deprecated and guarded against. Growth in whatever form is welcome so long it is healthy and normal. Economic life and political vigour act on each other. If we accept a one-sided economic development, we must be prepared to face a particular weakness that ensues.

Imperial Preference

It is a half-way house between free trade and protection. Its consideration is put off to the last for fear that in the triangular fight the issues involved might be obscured. It aims at securing the advantages of free trade and protection eliminating the evils by a compromise of the two. Increased intercourse for commercial purposes and economic bargain is sure to confer political solidarity, and effect political interests of vital importance. The political oneness of Germany and of the United States are the direct fruit of such a line of policy. There is a section of the English public, who apprehend that free trade imperceptibly loosens the bonds between the mother country and her colonies. They are for regulating tariffs on a common basis in the Empire as a whole, and for cooperation in matters of imperial defence so as to make Empire one economic unit, and strengthen the existing political bonds.

The Empire is to hold together as a federation of free democracies, with increasing unity of thought and feeling on all questions of policy that concern all alike. The manner in

which Canada, Australia, New Zealand and India rallied round the imperial banner during the Great War demonstrated the love and loyalty that lived in them.

The clash, however, came with the divergence of interests between the mother and the daughters. The colonies imposed protective tariffs on goods imported from foreign lands. They evinced a desire to safeguard their interests by making treaties independently of the mother. The exceptional advantages, which England once had for the sale of finished goods and the purchase of food stuffs and raw materials in Canada were at an end. In India and Ireland there is a widespread belief that free trade has done them irreparable injury, and that they have been exploited in the interests of British manufacturers. The discontent thus engendered has been the cause of political unrest and agitation.

With the last War the question of imperial preference has come to the fore. Japan and America have become England's keenest rivals in her Eastern Trade. By 1913 the American exports into Australia were not even one quarter of those of England. But the American trade with that island-continent has gone to 100 per cent. by 1932 while the corresponding figure for England is 30, and that in spite of the fact that England enjoys 122 per cent. *ad valorem* preferential duty.

The Case of Canada

Canada finds that cooperation is not really in her interests. She wants to be a self-sufficient unit, and what is more, she has her own visions of a great industrial future. For ages she has been a grower of corn and a hewer of wood, and is weary of it. She saw England wax fat on India's trade, and wanted to secure a foot-hold in the Indian market in spite of the fact that India produces the very raw materials as she does. In articles like motor cars, trucks, tyres and other accessories she is able to make great headway, and at the recent conference she pressed the Government of India Delegation for preference to her exports into India.

Of India

The Agreement prevents foreign articles from reaching India at low rates with the result that the price of English or colonial-made goods would be high. In respect of finished articles England fills the place of a monopolist, and the Indian consumer is deprived of the advantage of making a selection out of the large variety of things from different lands and getting them at competitive rates.

From the point of the Indian farmer the position is still worse. 70 per cent of the raw produce of India is exported to foreign lands. When England imposed 10 per cent. import duties in 1932, Indian tea, wheat, cotton, wool, animal hair, skins and hides are exempted from the category Preference offered by the Ottawa Agreement is merely nominal. In jute she has a virtual monopoly. Wheat is a necessary of life, for which there need be no preference at all, and the rest are materials necessary for her manufactures. To encourage iron, steel, cotton, sugar and other industries in the land the Tariff Board gave protection by imposing protective tariffs though this might hit the Indian consumer hard.

The Ottawa Agreement materializing, the protection behind which the Indian Mill-owner hopes to thrive would be swept away. From the Indian point of view it is a positive loss to the producer, the consumer and the mill-owner alike. The weakening of the cross rate since 19th September 1932 when the India Delegation signed their report, India has granted preferential treatment to Empire goods in excess of ten per cent. The ten per cent. reduction of duties on British imports by the Agreement further sweeps off the infant industries which have sprung into existence during the days of the Great War. The protection, which the revenue duties have up-to-now offered, and the progress so far made would be nullified. The expansion of our export trade is to depend on the capacity of England to absorb our raw materials, which are either necessities of life for which there is a finite limit or materials necessary for British manufacture which the continent consumes with

The greater part of our export trade is with countries other than England, and the trade balance is always in our favour ranging in normal years between 300 to 500 crores of rupees. It is because of this that we are able to meet home charges, interest on foreign capital and other foreign obligations.

The agreement coming into force the trade balance would largely disappear. The question as how to meet internal budgets and external obligations assumes great importance. Again, the market for our raw produce being restricted, and our capacity and necessity to produce continuing to be immense as ever, it leads to frequent gluts and low prices. The other parts of the Empire that purchase raw materials and sell finished articles to us take the position of a quasi-monopolist both in matters of purchase and sale. Trade depressions and financial crisis would become a permanent feature of our economic life, and all classes from the peasant to the prince would be hard hit. Both in the matter of sale of raw produce and purchase of finished goods we are at a serious double disadvantage, our field of activity being confined to a part of the world. From a legal point of view it cannot be said to be an agreement either, for an agreement can only be between persons who are equal and competent to contract. In this particular case we cannot say that India is a free partner with a will of her own either to agree or not to agree to the terms. It is void being without consideration but the one relieving feature about it is that it can be put an end to at the option of any of the contracting parties with a six months notice.

A careful weighing of facts inclines us to the view that protection is the best of the three, and is what the world wants and fast moving to. Protection is what we want, protection against foreign competition and dumping protection to develop our infant industries, and solve the problem of poverty and unemployment in the land.



CHAPTER IV

THE SOLUTION FOR AGRICULTURAL SHORT EMPLOYMENT

THE decline and decay of Indian industries may be said to have begun with the advent of European traders into India. The Indian market has been flooded with a large variety of articles of every day consumption at competitive rates. The outward finish and fine show of foreign manufactures have captivated the mind of the Indian customer. The absence of banking facilities and credit agencies, and the lack of support and sympathy from the people and the Government made it impossible for the poor unorganized artisans to compete with foreign traders with immense resources and scientific methods of production.

The Swadeshi Movement that followed the Partition of Bengal in 1906, though short-lived, has given a stimulus to indigenous production. Handlooms have been started in several cloth-producing villages. Small factories for the manufacture of sundry goods such as glass, enamel, pottery, hosiery, chemicals, paints, leather, stationery, pencils, biscuits, condiments, infant foods, steel trunks, pad-locks, iron safes, soaps, cigarettes etc., have been started in Calcutta.

With the breaking of the Great War there was a phenomenal rise in prices. Germany, Austria, France and England being engaged in the War, fresh impetus was given to the enterprising men of our land. Old factories increased their output, and new ones came into existence. The import duties levied by the India Government for purposes of revenue offered protection to our industries.

The War over, matters reverted to the old course. To re-establish their business and get hold of the market foreign traders considerably reduced prices, and Indian manufacturers had likewise to make reductions, often at a loss to meet

competition from outside with the result that many of them had to close work.

With the advent of Mahatma Gandhi into Indian politics a new spirit of Swadeshism caught hold of the people, not to disappear as formerly, but to stay in the land. The message of the wheel crept into the farthest nooks and corners of the country, and the people have come to look upon it as the solvent of the economic distress of the countryside.

The world trade depression of more recent date has revolutionised economic thought. The existing economic laws were called in question. Old theories were doubted, disputed and sometimes blown up. New theories were built and given a chance. Free trade receded to the background. Protection and self-sufficiency have gained the upper hand. The protectionist policy of France and America, "the Buy British" and "the Red Rose" leagues of Great Britain, the high tariff walls raised all round in over twenty-one countries are but the different expressions of one and the same desire to be economically free and self-supporting. India is no exception. The "Buy Indian League" with branches all over the land is the direct outcome of the spirit of the times.

The spirit and impetus are indications at the most of the way the wind blows. But without individual initiative and State encouragement they go but little way. Individual cooperation can do much. But the State can do a good deal more. It can offer cheap transport facilities for raw materials and finished articles. It can make money available to the producer and put in his reach the financial assistance he requires through banks and other agencies. Through State aids, bounties and orders it can in no time make the land prosperous.

It is neither unnatural nor too much to expect this of the State. For in the modern age the whole aspect of civilization has assumed an industrial character and brought to the fore the intimate connection between politics and economics. Besides internal and external defence the Modern state is called upon to undertake very many responsibilities such as mass education,

public health, development of natural resources, encouragement of national enterprises, and protection against foreign competition. Industrial efficiency India can never hope for without an amount of freedom to control her social, political and economic affairs and formulate her industrial policy.

Such a state is not foreign to but in conformity with the latest conception of Dominion Status. The two countries then with great benefit to each other be knit together in close bonds of love and goodwill on the basis of perfect equality and reciprocity in matters commercial and financial.

A Difficult Choice

That industrial development is the restorative of individual and national prosperity admits of no doubt. The old and the new, the traditional and scientific methods of production are now in conflict. We are on the parting of ways, and it is time to call for a halt and seriously ponder over before we choose one course or the other so as to avoid chaos and suffering that may otherwise befall us. What mechanistic production means, and how it acts and reacts on the several classes of society we are not unfamiliar with. There are many persons in our country who are for an out-and-out industrialization. The ghastly magnificence of industrial centres and the splendour and grandeur of merchant-princes, iron-masters and cotton-kings has created in them this particular kind of bias. In their opinion the old type means a go-back, a reversion to old conditions and smacks of "the bullock cart mentality".

A little knowledge of the industrial conditions lays bare the hideous truth about the matter. Machinery is not come to stay either to serve man or to heal the sores of society, but to dominate, and over-master him and create new ills and aggravate the existing ones.

It is not a blessing even in the case of the capitalist, the industrial magnate. His enterprises made him rich and powerful, and evoked the envy of the outer world. Everywhere we hear man say 'If only I had his wealth'. True he has much, but

he misses much. That is the tragedy of life, the pity of the thing which the world seldom cares to understand. World's richest men are by no means the happiest. They live an over-active, feverish life. They know no variety which is the spice of life. By too much concentration on a particular object—the amassing of wealth—they make mind a sort of mental prison and miserably end their days. Disappointment, nervous shock, suicide and untimely death are their usual lot.

The effects of machinery on the vast majority of the human race are no less telling. It has brought many to the depths of poverty and degradation. In the industrial world many suffer from malnutrition, while others are on the verge of actual starvation. Relief works are inadequate. Bread riots and street fights are common-place things. On every side plaintive wails are heard, and all this in the midst of more than plenty. A few millionaires and multi-millionaires at one end of the social scale while millions of unemployed and destitute occupy the other.

The perfection of mechanical skill is ever driving physical strength to the background. The need now is to improve the existing tools and hand-machines or to invent new ones that increase the efficiency and capacity of the worker without driving him away as is the case with machinery elsewhere.

Science is to serve but not to reign over man. It is to increase his capacity for production, but not to usurp his place and make him a slave struggling for a bare living, give a morsel to the hungry mouth, not to snatch the one it is about to swallow, cure the suffering of the unemployed not to intensify it, and add to the sum of human happiness but not to the overflowing cup of human misery.

Machine production being cheap, is it possible for the little craftsman and the small manufacturer to withstand, much less to compete? Is it possible for these working in small primitive workshops at home with small capital investments in tools and merely helped by their families? The answer is in the affirmative. A spinning wheel, a weaving loom, a sewing

machine, a potter's wheel, a printing machine, the manufacturer works with are small, simple, easily repairable and of low cost. The capital invested is small and the turn-over is large. Over-head charges, sinking funds, heavy taxes, enormous advertisement expenses and large stocks of raw materials and finished goods do not hinder the way as they do in the case of the capitalistic manufacture.

Germany and Japan have strikingly shown that properly guided and organized and full facilities for technical and commercial education offered, the small manufacturer can produce at such a low rate that no amount of industrial efficiency can beat him out. A large percentage of the cheap German and Japanese goods we get are 'produced by well organized small manufacturers in the cities, and cottage industries in the villages'.

Industrial development on small cottage scale fits in best with the peculiar conditions and needs of the country, social, economic and otherwise. With the skill inherited from father to son, with cheap human labour and low standard of life the small Indian manufacturer can fill the land with fine articles of his make at comparatively low rates so as to eliminate the foreigner from the market. Proper education and encouragement, guidance and direction are what are needed to put our industries on a sound economic basis.

The Case for Khaddar

Food and clothing are the minimum wants of man everywhere. Whether civilized or in a state of semi-savagery, climatic conditions, social conventions, personal tastes and fashions prescribe the amount, the kind and quality of the cloth of the wearer. Throughout the vast extent of the Indian Sub-continent we scarcely come across a village worth the name, which had not spinners and weavers of its own. Every family grew the needed cotton in its home-stead, and spun the required yarn just as it cooked its food. An ideal state though, it was too true of India till a century and a half back.

In the production of cloth India enjoys special advantages. It has a large supply of raw cotton, which grows in every Province. Its man-power is going to waste for want of work. The demand for cloth of every description is constant and unbounded. With a total annual value of 60 to 70 crores of rupees, cloth industry is second to none in point of importance. Agriculture is a precarious industry. Added to the uncertainty there is great under-employment extending over months. The presence of a by-industry adds something to the tender income of the farmer during fat years, and keeps off starvation and death from his door during lean ones. It should be one that is sympathetic with, but by no means antagonistic to agriculture.

The unemployment of women can best be solved by the spinning wheel alone. Etymologically the word "woman" meaning "weaving man" is connected with this cottage industry. Both by nature and the kind of duties she is to look after, woman has been found to be the fittest for this kind of industry. Physically weak to bear the brunt of the out-door work but with a patience that is all her own, and with much leisure at her disposal, woman is better fitted for this kind of work than her male compatriot. In lands where factory system has taken deep root, she has to shed a good deal of her house-hold work; and instead of being a true companion and a help-mate to her lord or parents, has become their deadliest rival.

That apart, the peculiar traditions and culture of the country are a bar to our women working in mills. The whole of Bengal may be said to be *purdah*-ridden. It is prevalent in every class from the highest to the lowest, Moslem and Hindu alike. Though not so intense it more or less exists among many classes in other parts of the country.

The reader may say that the days of *purdah* are over all the world through, and woman has all of a sudden thrown off her time-honoured veil in Turkey and Egypt, come to associate with man, and do her little bit for human progress. *Purdah* or no *purdah*, few of our people that have any other means

do willingly send their women to work in factor ^{ies}. In the jute-baling factories at Chandpur and Narayanganj, the Mahomedan males alone work as day-lab ^{ourers}. The idea of sending one's wife, daughter, sister or mother ^{is highly} repulsive and quite foreign to the nature, sentiment ^{and training} of the sons of India, whether Hindu or Moslem.

But on account of the existence of *purdah*, woman remains idle at home with ample leisure hanging ^{over like a} night-mare. It entails too great a strain on the ^{earning member} and involves much economic waste of woman-lab ^{our}. Would it not be far better for her to take to the spinning ^{wheel, and} combine pastime with profit thereby adding something to the common stock? Will woman spin for a trifling?

The question can best be answered in the ^{words of the} Director of Industries, Mysore, who in his report ^{to the States} Sub-Committee says, 'The irony of the situation ^{is, the insigni-}ficant income yielded by hand spinning is large ^{enough for} a large proportion of our village-folk to induce ^{them to strive} for it. No occupation is so easily learned and ^{interferes so} little with the main occupation of life. In the ^{absence of a} more paying occupation it is a folly to reject ^{hand-spinning} simply because the wages of hand-spinners are ^{so inconsider-}able in the eyes of town people. It should not ^{be encouraged,} and cannot be established wherever a more profitable ^{subsi-}diary occupation can be established. Where ^{no other alter-}native occupation is available hand spinning should be given a chance.*

Year after year the beggar problem has been assuming dangerous dimensions. The increase of unemployment amongst all sections of society is causing ^{fresh} additions to the ranks of beggars, and in solving the same ^{nothing is so} effective as the spinning wheel. The processes are simple and easy, and fit in well with everyone. The ^{able-bodied} beggar no less than the blind and maimed can attend to some process or other. Carding, for instance, is a ^{process simple}

*Vide *Liberty*, Epoch Number 1028, P. 85.

Great Figures of History by Dr. Surendra Chandra Banerjee.

enough which even the blind can work at, and contribute a share of honest labour in return for something received.

Without the wheel the poor houses and relief works that are looked to as a curative of unemployment amongst beggars have little chance of success. If the industry is universalized and the unemployed work at it in right earnest the fear often expressed that supply could not meet the demand, and that there would be dearth of home-made cloth would be groundless.

As matters now are the words uttered so long ago as 1798 by an eminent English administrator, Mr. Colebrook have not lost their force and freshness even today. To quote his words "there is no provision to relieve unemployment. Spinning gives the only employment to women to maintain their men during times of distress. It (the *charkha*) is the only resource to all the poor people, which contributes to relieve their distress."

The complaint often made against Khaddar is that it is coarse and costly. As it is, coarse no doubt, and costly too. But those who follow the gradual evolution of Khaddar movement cannot but be struck with the improvement it has made during the last decade and a half after practical disappearance for over a century and a half. Fineness goes with efficiency which is a matter of time, and price is bound to come down with the attainment of the former. More yarn means more cotton and higher cost of production. Though the cost of fine counts is lower than that of coarser ones, its price is kept up to make up the loss on the lower counts. Until greater efficiency is reached and cloth improves in quality which is not too much to expect in near future, the price of coarser cloth is bound to remain high.*

The further question is why should we bear this high cost and that for rough and unseemly things? As consumers

*A new *charkha* invented by Mr. Rajagopala Modakar enables an old woman with just a week's training to produce three, as much as is being done in a day. It shows the scope for the application of mechanical invention to improve cottage industries.

we are concerned with the cheapness and fineness of the thing purchased. Criticisms such as these proceed from a lack of understanding of the inner workings of the economic laws. It is well to know that whatever is cheap is not necessarily economical. A thing has two costs: immediate and ultimate. A pair of mill cloth may be cheaper and can perhaps be had for half the cost of a pair of hand-spun. But it does not last for more than a year while the other wears well for thrice the time. Ultimately the one costs more than the other. Where people have greater opportunities for employment and earning, the trifle of a few rupees for the purchase of cloth does not matter. But when they are unemployed, and have no work, and no money, does cheapness make any difference? That which makes the nation as a whole rich is economical.

Mechanisation does not make the people any the richer for it. It on the contrary reduces them to the position of servile day-labourers and brings in unemployment, want and woe to their doors. To the existing social ills and distinctions, it adds some others as if their present number does not suffice. It engenders a capitalist class a handful of individuals, rich, oppressive and powerful controlling and managing the industry and guiding the destinies of the people at one end of the social scale, while at the other there would be innumerable wage-earners, a class and a big one no doubt, but with no money, no power, and no influence, dependant and helpless, ignorant and superstitious drudging a dreary existence in the depths of human misery and suffering in the huddled ungodly slums of modern towns.

The spinning wheel does not admit of the possibility of the rise of such classes with divergent interests. It makes none too rich nor leaves any too poor. It adds to every one's income and that moderately.

The insignificant income of an anna or two per head is not a serious objection when we take into account the glaring fact that the average income of an Indian per day is not higher. An industry that adds as much as our average individual

income to a considerable number of starving poor cannot be flouted as of no consequence. Take the case of a village with a population of, say, 1000 souls. 10 yards a year is the irreducible minimum per head. Even at the lowest estimate of 4 annas a yard the price of cloth annually consumed comes to Rs. 2,500, by no means an easy and trifling sum to lose, which the wheel and the loom save from flowing out.

But why go back to primitive wheel of bygone barbarous times, why not produce all we want in mills and factories? The process is easy. It meets our requirements which are large and varied. About 940 factories are required to supply the requisite amount of cloth to the country. The actual benefit is to a few capitalists. The cost of the plant is high, and it goes to the foreigner. The people as a whole are not benefited.

The labour absorbed cannot exceed one crore of our population, say, six times the present figure which is 1,50,000. Agriculture is uncertain and it today suffers for want of a by-industry during off-seasons. In Western countries peasants have from other sources 5 to 10 times the income they derive from agriculture. But if instead of providing by-industries, the country is industrialized, agriculture, the main industry of the land on which about 80 per cent. of the population depend, would be adversely affected. The strong, sturdy, intelligent farmer would be drawn to the factory. As in England and other Western countries this will force on the land industrial revolution with disastrous consequences. Agriculture will cease to be the concern of the petty farmer, and the capitalist will step in to carry it on a large scale as in America with his costly machinery—the steam plough, the machine reaper and the winnow, affording employment to about a crore at the most on the whole. What to become of this huge surplus? Wherefrom to get work for these and who is to maintain, and how? Humanly speaking is it possible to conceive much less to devise any workable scheme for saving this staggering number?

The farmer is the reserve power and strength of the state and the nation. It is erroneous to think that his interests are different from and inimical to those of others. The revenues of the state, the rents of the zemindar, the profits of the merchant, the fees of the doctor and the lawyer do in the last resort come from this oft-forgotten but never-failing source. With their well-being the fortune of all classes is inextricably intertwined.

As we get what we have from the agriculturist, the law of nature insists that we should return to them a portion at least of what we receive so that we may get it back. With cloth and other cottage industries industrialized this 'sacred cycle' cannot for long be maintained.

Mechanistic production with its faulty distribution is a negation of true democracy. It puts the capitalist with a long purse in an advantageous position to carry the day in election campaigns. Democracy everywhere is put to severest of trials, communism in Russia, Fascism in Italy, Hitlerism in Germany, Rooseveltism in America, are indications of the direction the wind blows.

The spinning wheel assures a fair and equitable distribution of wealth. It makes all equally rich and equally poor, leaves no scope for glaring inequalities of wealth and evolves a strong, contented middle class the lack of which is the fruitful source of frequent social and political upheavals in the West. It is the one sound process of 'democratic distribution of wealth'.

We are on the eve of great political reforms. Economic independence is the precursor, the moulder and the sustainer of political independence. Without it political freedom is a mockery liable to abuse. If to the landed oligarchy the class of capitalists is added, money would monopolize power and democracy would hardly pass the stage of experimentation.

But what attraction does cottage industry hold to the educated and the well-to-do classes? The cloth is coarse, and does not appeal to their refined taste. The answer is that while machinery reduces production to dull uniformity, this

industry is capable of varied art-development. The unemployed youth can start handloom industry to make fine cloths, shirtings, towels, napkins, bed-sheets, handkerchiefs, lace, ribbons, etc. In embroidery, lace and other kinds of artistic work, woman with her infinite patience and innate love for art may prove superior to man provided education and opportunities are not lacking. If the intelligentsia of the country take to it in right earnest, improvement at all times is ensured. The double production loom invented by Mr. N. Banerji, Principal, Government Central Weaving Institute produces two cloths at a time and yields twice the production of any fly-shuttle or other looms used in India. It is free from trouble and easy to handle, and its introduction may give a great impetus to the handloom industry in the country.* Though the world renowned Muslin Industry of Dacca is now nearly extinct still fine Muslins are exported to Arabia, Turkey, Egypt, England, France and America.** In ancient centres like Chandranagar, Dacca, Shantipur, Murshidabad, Sirampore, Hooghly, Burdwan and Pondur, fine cloth is still produced from high counts of yarn.

‡

Woollen Industry

Shawls and other woollen goods are made on handlooms by local weavers with the wool secured from Tibet Kashmere and the Punjab. The decoration works on these shawls made by hand sometimes cost Rs. 500/- to Rs. 1000/-. The Zemindars and the moneyed classes in and outside India largely support this industry, though the cheap cotton and jute shawls from Germany are spoiling the industry. Besides, in the making of costly carpets the artistic decorative skill of the Moslem in parts of Northern India is par excellence. But on account of the cheapness of Indian and Austrian carpets in our markets, most ancient business in the country is fast receding to the background.

*Vide Indian Review, Oct. 1932, page 745.

** Liberty Pooja Number 1939, p 70. Scope and possibilities of Industrial Development in India by Mr. Charu Chandra Chatterjee.

The wheel is decried as inimical to scientific progress and industrial development. It is said to represent the conflict between the civilizations of the East and West and widen the gulf between making it impossible for the "twain to meet". 'Rightly understood it is not a question of conflict between the civilizations of the East and West, but a conflict between God and Mammon. It is not a fight in India alone, but a fight all the world over against the thing that degrades the spirit of man wherever this prime modern evil triumphs. It is a revolt of the individualism of man against the devil of modern production.'*

Silk Industry

For mass production we have all the necessary factors, a large extent of land, an agreeable climate and a great supply of cheap labour. The fear that artificial silk would oust natural silk is not well-founded. We are today importing artificial silks to the tune of 5' 48 crores of rupees and natural silks of no less a sum. The artificial silks are mostly from England and Japan. In the availability of raw materials for producing the same we are second to neither.

Like cotton it is a home industry that combines profit with pastime, and brings in plenty and prosperity to the doors of the worker. Whereas Italy and France can grow one cocoon crop, and China and Japan up to three, India is the only country that can grow up to six crops during the year. The cotton production on an acre of land is more than the average sugar cane crop, and may go up to 4 times the value of the last sugar cane crop.

The costs of cultivation are comparatively low as the duration of the crop from start to finish is about 4 to 6 weeks, and is worked indoors. If we rear all the silk we need, the industry is capable of giving employment to about 15,00,000 of families all the year round. But having regard to the world demand, which is about 30 crores of rupees annually, and

* The justification of Charkha by Mr. Theodore Maynard in the "Catholic World" a catholic journal of U.S.A. Modern Review August 1931, Page 210.

the facility we enjoy the industry is capable of supporting many more, if it is taken to by the educated unemployed. Our silk-worm is hardy with greater disease-resisting power than any of its kind. Our fabrics are stronger, and our silks finer than those of any country.

With all that the industry is in a deplorable state. The export of silk yarn from India to England is about 2,00,000 lbs., which is worth about Rs. 17,00,000. Of this more than half is exported from Kashmere alone. In Mysore and Madras the industry is struggling for its very existence, while in Bengal the position is worse still. In Pabna, Raipur and Dinajpur the industry died long ago. In the districts of Rajshahi, Midnapur, Hoogly, Nadia and Bogra it has almost been abandoned in favour of agriculture while in Malda, Murshidabad and Birbhum its out-put is being greatly reduced.* Still many villages in Burdwan, Bankora, Bhagalpur and Benares produce fine qualities of silks for shirting, coating and clothing purposes. They partly meet internal demand and export to other parts of the world. The villages near Tarakeswar and Hoogli prepare a kind of cotton and silk mixed shirtings and export them to America where there is a great demand for them especially among ladies.

With half an acre of mulberry the Mysore rearer grows six crops of silk. Bad seed, and want of knowledge and resources account for the loss of two crops. Still he makes a net profit of Rs. 100/- a year. With state encouragement mulberry cultivation which extended over 25,000 acres has now doubled itself.

Surrounded by sea on all sides which makes the air moist and unfavourable to the worm, with no great extent of land, and a labour force not cheaper than our own Japan has not the advantages we have. Yet she to-day supplies 64 per cent. of the silk demand of the world. The state is keen about the improvement, and the industry is in the hands of educated men. The Emperor and the expert alike evince great interest.

*The address of Mr. R N Banerkar on the occasion of the opening of the South Indian Khadi Bhandar at Nalhanagarh, Bahgaikot, December 1951.

The use of unexamined seed is penalized by state, and ample provision is made for the supply of examined and disease-free seeds. In our land worm-diseases, hereditary and contagious, cause great havoc. Swarms of worms fall a prey to the disease, their disease-resisting power notwithstanding, just at the time the cocoons are expected. The ignorant farmer finds too late that the worms are infected and useless. He has no means to fight the same and his labours are all a waste. While Japan's production on an average ranges from 7 to 10 maunds per acre per crop the Indian Average does not exceed 3 maunds a crop; and if by improved methods our educated men can raise the standard of our efficiency to Japan's level, our out-put per acre may rise to $(6 \times 10 \times 20) = \text{Rs. } 1200/-$ even calculating at the low rate of Rs. 20/- per maund of cocoons, the usual rate being twice as much.

The want of knowledge and cooperation among silk-worm-rearers and the crude methods of reeling are much to do with the present state of the industry in the land. If the industry is to flourish on our soil and cure the chronic unemployment, the first thing to do is to impart practical technical education in our schools and colleges, to start silk centres in different parts, develop them into a big cooperative silk guild, start model farms on scientific lines and rear silkworm on a commercial scale so as to show to the cultivator and the educated youth the financial possibilities of the industry. Here is a vast field for experiment and research for the student of science to improve the breed and power of the worms, to study and analyse different diseases, their reasons and remedies. In the weaving of cloth and in the artistic side of skilful decoration the intelligent youth finds much to improve and profit by. The Sericulturist may make a study of the several sericultural organizations in China, Japan, Italy and France with a view to improve our own.

Fibre Industry

India is rich in fibres. The jute, the cocoanut and palmyra fibres besides other local varieties such as Gogu,

Kitta, Janapa, are found in plenty. If the industry is put on a sound economic basis, it would in large part solve the agricultural short employment and alleviate the economic distress of the people.

Jute

No other country than India produces jute. There is no substitute either as was the case with indigo in the last century and with lac in the present.

Of the total production Bengal, Bihar and Assam produce about 90 per cent. Natural monopoly notwithstanding, we are not reaping the benefit we ought to. Over production is stated to be the cause. But in face of the increase in prices during the 30 years beginning with 1900 the contention is void of substance.

The following figures do elucidate the point.

Year	Area in thousand acres	Yield in thousand bales of 400 lbs.	Calcutta price per Bale
1925	3,115	8,940	Rs. 119. 9. 9
1926	3,847	12,123	" 98. 11. 6
1927	3,374	10,188	" 76. 6. 6
1928	3,144	9,906	" 75. 0. 11
1929 .	3,415	10,335	" 71. 4. 0
1930	3,492	11,205	" 50. 4. 9
1931	1,859	5,535	" 37. 11. 10

In 1926 with the greatest average under cultivation the yield was the biggest, and the price was high—second only to that of the previous year. In 1927 and 1928 the fall in average did not bring about a rise in price. Rather it fell. In 1931 the average was nearly half of, and the yield was less than half of the preceding year. But the price did not go up. It on the other hand went down by about 26 per cent. thereby

laying bare the utter hollowness of the argument. The contention that with the fall in commodities to transport the demand for containers has gone low, and that with it the price for jute fell has no force either. Jute is put to a variety of uses in addition to being used for containers.*

The scientific methods of production and the policy of national self-sufficiency in every advanced state have brought the question of crop restriction to the fore. Some want it to be voluntary; others like to make it compulsory. Voluntary restriction is no restriction at all. Evasions would be many and difficult to check. State legislation and executive pressure can make it effective. But laws are inflexible. Once passed they get rigid, and bear hard. Foreign trade is uncertain and crop yield is not yet within man's power. Causes beyond his control such as a drought, a pest or a frost may operate to upset his calculations. Besides, how much of a thing is required for consumption at a particular period is not easy to calculate in the absence of accurate statistics. When substitutes are many and imports free the need for caution is all the greater. The rise in the commodity prices, which restriction brings about, is an added incentive to the importer to flood the indigenous market.

Firms in India are backward, conservative and inimical to progress. Year after year they produce the same articles. Whereas the cry here is for restriction of produce, people abroad are astir for suitable substitutes for jute, paper and other containers. Restriction benefits them in ways more than one. It keeps high the prices of manufactured jute exports from Calcutta, and offers facilities to foreign mill-owners to undersell it.

Restriction of output of mills is not beneficial either. A certain per cent. of the jute grown would be consumed by the Bengal Mills. Being unorganized and lacking in methods of marketing, our growers fling the rest of the stock abroad and compete with one another. Export tax does not help

to keep up the price; monopoly avails but little, and foreign markets would be glutted. With jute got at competitive rates Japan may manufacture and undersell Calcutta as she does Bombay with her textiles from cheap Indian cotton.

The utter dependency on foreign markets and great shrinkage in international trade in agricultural produce since the depression is in one word the cause. And the effective remedy for it is the organization of the industry on a cottage basis with machines that are small, simple, cheap, and easily handled by the farmer to ensure a steady internal market while the study of the conditions of the foreign market and demand through foreign agencies and sales bureaux, and dissemination of knowledge the way to make use of the restricted areas through propaganda would put the grower on his guard as to the quantity to be produced, and the manner and method of marketing.

Cocoanut Fibre

Coir, Cordage, bags, mats, mattresses and other articles of utility can be made of cocoanut fibre. On the east and west coasts in Konkan, Malabar, Travancore, Cochin and in parts of Tamil and Andhra provinces cocoanut is largely grown. For want of capital, skill, and marketing facilities, and by competition from outside the industry is languishing. With no improvements since the 15th century it has remained in a primitive state.

In 1930-31 the coir exported to the United Kingdom was valued at Rs. 7,580/-, the Empire countries at Rs. 8,588/- and Foreign countries at Rs. 10,554/- making a total of Rs. 26,722/-. For 1931-1932 the figures for the respective countries were Rs. 9,875/-, Rs. 10,631/-, Rs. 8,381/- with a total of Rs. 28,887/-. For 1932-1933 the figures were Rs. 5,354/-, Rs. 6,166/-, Rs. 6,741/- with a total of Rs. 18,261, and for 1933-1934 they were Rs. 6,283/-, Rs. 7,502/-, Rs. 7,653/- respectively totalling Rs. 21,438/-

The export of coir yarn for 1933-34 to the United Kingdom was Rs. 1,409/-, the Empire countries Rs. 1,767/-, and

Foreign countries Rs. 6,357/- while coir mats and mattings by the respective countries during the period came to Rs. 4,419/-, Rs. 5,270/-, and Rs. 1,194/-. As a result of the Ottawa Agreement export to Foreign countries has diminished from 72 to 67 per cent. while the trade with the Empire countries increased from 28 to 33 per cent. and with the United Kingdom 25 to 28 with a net gain of 3 per cent. If the industry is to come to its own and prosper it is to receive encouragement and direction at the hands of the State and the educated classes.

Palmyra Fibre

It is largely exported to France, Germany, Britain, the United States and Australia in a raw state to be made into brushes and brooms. The imports of all finished categories into the country in 1930 aggregate Rs. 13,89,000/-, in 1931 Rs. 11, 65,000/-, in 1932 Rs. 8,63,000/-, in 1933 Rs. 12,54,000/-, and in 1934 Rs. 10,97,000/-.

Consequent on the preference of the Ottawa Agreement imports from the United Kingdom have increased. If the enormous quantity of raw fibre exported overseas is made into brushes and brooms here, and if their utilization for other purposes is investigated into, the annual flow from India would not only be arrested and the country become selfsufficient, but could carry on a lucrative trade with the world outside. The introduction of simple husk-crushing machines, and handy coir-twisting machines for extraction and spinning of fibres along with the diffusion of a knowledge of the process of retting will put the industry on the path to progress so as to offer real relief to the thousands of poverty-stricken homes on the country-side.*

*Vide Indian Fibre Industry

by

Mr. N. Krishnarao B.A., B.L.,

in the Hindu, October 30, 1934.

Sugar and Jaggery

India annually imported sugar to the extent of 18 crores of rupees, the largest figure next to cloth, and this notwithstanding the fact that we had two to three million acres under cane cultivation—an average, which no other cane grower in the world has.

The reason is self-evident. It is an industry, which cannot be safe in the hands of the ignorant farmer. Every process, which the preparation of the sweet material involves, requires an amount of care, exactness and scientific knowledge not to be found in any but those who are specially trained for the purpose. Our methods are crude; our cost is high; production poor; and market disorganized. Open competition and free trade have done the rest.

Germany has long launched on a policy of dumping our markets. With the grants, aids, and bounties of the state and the perfection of scientific methods she is making sugar out of waste wood* and saw dust in addition to sugar from beet-root already in vogue. She has recognised that sugar is a luxury of life with no nourishing qualities, and raised its inland price by the imposition of a tax so as to make good the loss by selling it at low rates in India and thereby capture the Indian market. It is placed beyond the reach of the poor in their land, and the rich have to pay a higher price to make it thrive. The indigenous producer has to vacate the field and leave the foreigner real victor in the race.

The taste for *cheeni* is fast spreading in the country. The methods of manufacture are costly and complicated. A 'scientific' study of the several processes is of immense use in running a dying industry under controlled conditions. After the *rab* is boiled in a pan not to the same extent as in the case of jaggery, it is to be collected in earthen basins, and allowed to cool by constant stirring. While the liquid is still

* The wood sugar is also regarded as a cheap basic material for the production of alcohol and other products of fermentation. Vide Indian Review 1933 January, page 87.

hot, it is collected in pots and allowed to slowly cool down into crystals in special compact go-downs. The improvement in colour involves costly and laborious processes. High temperature is required for the formation of crystals. But if rains early set in, artificial heat is to be generated by constant burning of lamps to counteract the action of the wet weather.

The preparation of brown sugar does not require so much trouble and labour as the other. The introduction of foreign body, a small quantity of ordinary sugar, into the sugar-solution aids to the formation of crystals. Compared to the other it has a better taste, finer flavour, and a richer vitamin value. Great medicinal virtues are sometimes claimed for it. But the quantity produced is limited for the reason that under storage it loses colour. On account of the presence of molasses the crystals become sticky and adhere to one another during the rainy season. From a commercial point of view, however, the presence of the molasses are a positive gain in that they add to the weight of the thing. Manure can be made out of molasses as in Java.

The proportion of sugar in the cane is less than in the beet root. But compared with beet the cane yield per acre is twice or thrice as great. Though mainly made from cane and beet, sugar can be won from a great many other plants such as the Indian Saga palm, the Nipa palm, the wild date palm, the cocoanut palm, the palmyra palm and such others. Cocoanut jaggery can be refined into fine crystalline sugar. But tapping has most deleterious effects on the yield and longevity of trees tapped.*

Jaggery is nowhere consumed except in India. With the increase in taste for foreign sugar, whose snowy whiteness is pleasing to the eye, there is a gradual fall in demand for jaggery. It is popular with the masses, on account of their conservative instincts. There is, therefore great possibility for its expansion in the country as well as in the colonies

*"Sugarcane, Coconut Jaggery" by The Industries Department, Bangalore.
In Hindu 1374, 1375, 1376.

such as Kenya, South Africa, Federated Malay States where Indian labourers have settled.

Apart from competition with sugar it has drawbacks of its own. There is now no proper regulation of production and supply. The farmer parts with the material the moment it is ready for prices often not covering the cost of production to meet his urgent needs. There are no warehouses, and no facilities for cooperative marketing, and this not unoften leads to a glut in the season. The absence of standardization and the practice of mixing the different grades of material lead to the deterioration of the quality of the stock as a whole. So far little is done to remove the obstacles in the way of free and easy transport from the interior parts of the country, and what wonders that the farmer gets low prices for his stock!

As a result of the seven years' protection offered by the Government the industry is well on its way to progress. But here the question recurs on what lines and to what end? Sugar is not like cotton either. It could not be preserved for long, and the supply is for a season. Machine is a heartless monster that knows no rest, and needs none if it is to thrive. In cane specially it can have no work all round the year. It has to remain rusting for many months notwithstanding the large capital outlay, and from an economic point of view this is a sheer waste. Itself not being wholly employed, it aggravates unemployment in the country.

To secure supply all the year through cane is to be raised at different seasons. Two planting seasons, and two harvesting seasons, Summer and Winter crops as in Cuba may sound well. Granting that the cane be grown twice is it desirable to establish sugar factories in the interests of the people and the country at large? If the industry is run on the lines familiar to the farmer but in the light of scientific knowledge and improved methods by the educated youth trained for the purpose, it is capable of affording employment to about 15 millions of India's sons, who for want of work and bread now wither in rustful idleness during a large part of the year.

This affords employment to the farmer at a time when he cannot engage himself in agriculture. The opening of technological courses to train a few experts is no real remedy. What we really need are skilled workmen, trained in the different processes of the industry by short practical courses so that the industry may not languish in the hands of poor ignorant farmers sticking to old, worn-out methods.

The trained scientist may work in his laboratory in order to solve the many mute questions and bring to light improved methods of production. A study of the industrial methods in different parts of the world is not without its use. The method of separating molasses from crystals with the help of centrifugal hydro-extractors run by hand, which is in vogue in the United Provinces, by the simplicity and the cheapness of the machine run by hand labour commends itself for immediate adoption, and the question of producing refined sugar on the lines of cottage industry can be solved.

FRUIT INDUSTRY

No other country is capable of producing such a large variety of fruit as India is. With her rich and fertile soil, and varied climate she is far more favourable for orchard-farming and fruit-rearing than any country on the face of the globe. Kashmere, Kumaon hills in U. P., Kulu valley of the Punjab, and Quetta grow good apples, peaches, plums, cherries, apricots and others. The plains of the U. P., and Bihar are noted for mangoes, *lichees* and *locquats*, the Central Provinces for Nagpuri oranges, Bombay for Alfonso mangoes, bananas, sapotas, the Punjab for Mattas and grape-fruits, Bengal for cocoanuts, bananas and mangoes. Madras by virtue of its climate is more suitable for the cultivation of special varieties than any of these. The variety of her mangoes along with their excellence remains unequalled. Her plantains are sweeter than those of Bombay with the result that fruit merchants pay higher price for them.

In a land mainly vegetarian for centuries past the importance of fruit as diet can hardly be over-estimated.

Our ancestors have found it to be the most 'Savvic' of foods, the best and the most nourishing for the system. The vitamin content of fruits is high, and in some cases it is their monopoly. Vitamin C is to be found only in fruits. It is not to say other vitamins are not found in fruits. Whereas Alfonso contains C vitamin, Banganapalli is rich in A vitamin. An all round vitamin diet may result from an examination of the several varieties of mangoes. To balance the poor Indian diet 'Eat more fruit campaign' should be launched.

Horticulture formed an important study of the Sages of old. The Veda makes mention of a few varieties such as the date (*karjura*) the Zizyphus (*badari*), Strawberry, (*Amla*) but it is not clear whether these were regularly grown in gardens or obtained from forests with which the land has abounded. The Ramayana is replete with references to the wood-apple, the pomegranate, the jambo, the plantain and the jack. Virukshayurveda, the science dealing with plant life in the form it is available to us deals more with horticulture than with agriculture. Under the patronage of Hindu kings gardening has considerably developed. Krishnadevaraya was credited with having grown many gardens. Though the mango was long known, grafting seems to have come into vogue with the Portuguese, while the credit of introducing Batavian oranges, the feature of the Palkole tract of the Kistna district falls to the Dutch.

Science applied to fruit growing has enabled America to capture the world's fruit markets both fresh and canned. Australia, Newzealand, South Africa, Spain, Italy etc., followed suit. But being mostly in the hands of ignorant and illiterate *malis*, India lags far in the matter of production and marketing.

If we are to become strong of limb and mind and take our rightful place in the comity of nations, the Agricultural Department and the enlightened public can no longer remain indifferent to this most vitalizing industry. It is a matter of intense grief to note that we annually import twenty million rupees worth of foreign fruit, and that inspite of the fact

that we have more than five million acres under fruit and vegetable gardening.

"In the economic uplift of rural areas, in the financial success of large irrigation projects which are undertaken at the cost of huge amounts in the Deccan, Sind and other parts of the country, and in the successful development of vast tracts of country-side, where the ordinary agricultural crops are not a financial success, the fruit industry has to play an important role."* In areas where crop cultivation has proved unprofitable due to the depression, and where restriction schemes are a necessity, fruits such as pine apples, papayas, plantains, custard-apples, guavas, limes, toppary, phalsa etc., should be grown.

The educated classes have to acquire a sort of partiality for garden-growing. It is to be a pastime, a recreation, and a relief against a strained and sedantic life. It is a lucrative business and not to be looked upon with disdain as heretofore.

In the West gardening is a dignified common occupation. But it is here neglected by the educated man. In Bengal, for instance, many households in the mofussil have their own gardens, ill-managed, and ill-kept, which when exploited by young men of those families, would yield substantial profits. "What is wanted is a change in the basic values, a change in the point of view. What the struggle for existence is slowly bringing about, may be consciously planned, and a good deal of waste and misery avoided. In that vista 'the back-to-the-village cry' receives a new orientation. The wheels of progress must go round the roads of the villages."**

Fruit culture is to play an important part in the economic development of the country. Every agricultural farm should have a fruit farm of its own for carrying on fruit researches. In every branch of fruit industry there is a wide field for

* *Village Fruit Research in India in Current Science* by Dr. G. S. Chuna D.Sc., I. A. S., Government of Bengal.

** *Mr. G. S. Chuna, I. A. S., writing in the I. H. J. for January 1933*

active research for improvement in the quality of seeds, the nursery stock, and the methods of cultivation, for selection of suitable varieties to local conditions,* for controlling diseases, for bettering, storing and marketing conditions, and for the proper utilization of surplus produce. The several Provincial Governments have recently started fruit research stations. The Bombay Government have launched a scheme of fruit marketing specially of mangoes in the English markets. Export depends on finding varieties that keep well during transport. The experimental station at Poona found that Alfonso of Bombay keeps in cold storage for about 45 days, Peter of Salem for about 20 days and Suvarnarekha of Vizagapattam for about 7 days.

That Banana is injurious to health is a mis-conception. As it is, the fruit is very nourishing. It is richer in solids and lower in water content than other fresh fruits. Due to the presence of easily assimilable sugars, it is a good source of quick energy. The diabetic and sprue victim can easily absorb its carbohydrates. It contributes calcium, magnesium, phosphorus, sulphur, iron and copper to the diet in no mean measure. By stimulating the production of haemoglobin it helps to regenerate red blood. It provides antiscorbutic and other vitamins, and taken with milk forms an almost balanced diet.**

But banana is easily perishable. The Nendram of Malabar keeps for about a month. On chemical analysis it is found that it is due to the presence of potash in the skin to a greater extent than in any other variety. The effect of potash manuring on the keeping quality of the Rastali, the chakrakali and others is being tried with some success.

Cut, dried and powdered in the proper way, the fruit powder proves to be a better substitute for most of the food powders we get in the market. The process is known as

*The trial of hundred varieties of grapes yielded to varieties which gave sweet fruit in the Punjab.

** Vide The Nutritive Value of Banana by Dr. Walter H. Eddy, Professor of Physiological Chemistry in the American Periodical Association, August 6, 1933, Also see Health and Wealth Vol. IV, March 1935.

'plantain' figs'. It was introduced from the West coast in Aduthurai Farm in Tanjore. With a good taste, a fine flavour and a high sugar content, chakrakali is specially fitted for making figs. The fruit research officer at Sabour in Bihar has shown that a better quality can be prepared out of fruit at a cheaper cost than are available in the market.* The stems that are now a waste will yield a fine fabric for the costly wear of the rich if well utilized after the bunches are cut.

Picking and Packing

The mango and the like are to be picked when they become well matured but before they are fully ripe. If they are picked too green, the colour would be dull, the taste insipid or acid, and the value low. If they are over ripe, they would not store well, and stand for a distant market.

In their ignorance our fruit-growers think that their job is done with production, and that the middle-man purchasing the stock is concerned in taking the same to the distant city markets. Either by fall or hard pressure during transit about 50% of the fruit becomes useless. To compensate for the loss the retail dealer charges a higher price. The prime producer, who has to part with fruit at a discount, and the ultimate consumer, who has to pay a higher price, are the worst sufferers.

If waste and damage are to be avoided and better price is to be secured, greater attention is to be paid to picking, grading and packing. One by one the fruit is to be gathered with the hand or by means of a picking basket. The fruits are then to be washed, wiped, and dried in cool weather, and packed either in strong rimmed baskets or in thick boxes with enough of leaves and straw at the top and the bottom so as to withstand hard pressure and jerking during transit.**

* L.H.J. Feb. 1935, P. 468

** Marketing of Mangoes by Mr. S.K. Mitra M.A., Ph.D. Economic Botanist to the Government of Assam A.B.F., Sep 25, 1932.

Transport Facilities

Cold storage facilities and fast running trains that reach the market in the morning are to be provided. Special booking clerks for fruit parcels are to be appointed during the fruit season from June to August. Reduction of Railway rates by one half on all fruit parcels, and provision of refrigerated vans for long distance parcels and delicate fruits without extra charge will greatly help to develop fruit trade. Arrangements made for safe and rapid transport will avoid loss and delay.

Cooperative Marketing

The small fruit growers are to establish and maintain Growers Associations with annual subscriptions on co-operative basis for unloading and delivering the plucked fruit. For packing and shipping purposes, and for sale through proper agencies in big towns the middlemen should likewise have similar organizations. The state, the cooperative societies, the railway authorities, the landed interests and the educated classes can do a good deal towards the reorganization of this most pleasant and paying industry.

Preservation of Fruit

All countries except our own preserve their surplus fruit in cans, jams, jellies and juices. If the fruit that decays in our markets is preserved, we could develop a beautiful industry of our own both for indigenous and foreign markets. Because of the unbounded scope which we have for the growth of diverse varieties of fruits, scientific processes of preservation are more important in our case than in any other. For want of methods of preservation a large quantity of mangoes is going to waste every year. The fruit preservation factory at Muzaffarnagar, U. P., under the name of Shanti Brothers has collected data, and gained some experience for successful preservation of mangoes and litchies.

Similar experiments are being conducted in the Punjab and in Bihar for making fruit pulp and drinks. On the methods

There would be more economic flow of water and less wastage on account of evaporation. The temperature of surrounding lands would be rendered mild and the expansion of the desert area held in check. Trees planted in two rows along both the banks at the rate of 704 trees a mile with an estimated annual yield of $2\frac{1}{2}$ maunds per tree and Rs. 5/- a maund do secure Rs. 8,800/- per mile from the 10th to 15th year of cultivation whereas after 20 years the yield is wont to be five times as large.*

Bee-Hiving

Honey is the natural food fit for consumption without the intervention of any 'processing' by man. Besides the desirable glucose (dextrose) it contains the rare and valuable sugar laevulose. It 'also contains traces of iron, iodine etc., the elimination of which from our sophisticated diets is one of the tragedies of civilization'.

Honey energises the heart, and benefits the patient in a sinking condition, and is daily made use of in several hospitals in England.**

In India it formed the main item in the diet of our Vedic ancestors along with fruit and milk. The Rig Veda is replete with reference to sweet-scented, and wholesome honey got from the hives in our forests. It is reputed to contain the 'Shadrasams' which are indispensable for a well balanced diet. Its medicinal value has long been recognized by our forefathers. Charaka mentions it as an important ingredient in the preparation of most of the Asavas and Arishtas. In fever, cough and consumption it is largely made use of. Taken daily with cold water it reduces corpulency and cures constipation.

So short is now the supply that a seer sells at rupees two in our markets. Even then pure honey cannot be had unless the purchase is direct from the seller of the hive in the natural state.

*Dates by Mr. J. N. Bose F.R.G.S., Modern Review Nov. 1934, Page 550.

**The London Times, 23-6-34 and the Hindu of the 14th March 1935.

The methods in vogue for taking hives are crude and barbarous. Fire and smoke used to destroy the insect, curtails the scope of future crop not to speak of the violence and wickedness of the act itself. More humane methods ought to be adopted. The easy availability of good hives, foundation combs, ex ractors, smokers, mils and gloves at a moderate price go a long way.

Run as a cottage industry bee-hiving supplies a healthy, wholesome food besides bringing in a decent income to the now-almost-empty purposes of millions of our village-folk for a trifling expense. It is first to be tried in select areas. If conditions are found congenial, fresh swarms may be brought in. As the bee is a good pollinating agent fruit-growing and bee-hiving are interdependent and mutually help each other.

Poultry-farming

It is not an industry unknown to our people. But fowls are reared not much with a view to market as to consume them. With the growth of towns and the increase in the number of egg and fowl-eaters, the demand is rising, and farming on a commercial scale is feasible and profitable. They render invaluable service to the farmer by eating insects invisible to the eye, and yield a most valuable manure.

The existing stock is to receive special attention in the increase of numbers as well as in the improvement of quality. Good breeds of fowl such as Light Sussex, White leg horns, Black Minorcas, Rhode Island Reds are to be introduced. Better methods of feeding and rearing are to be adopted. The food they eat, the diseases they are subject to, the causes and remedies, and the methods of prevention are well worthy of the investigation of the educated. With the provision of marketing facilities the business becomes more lucrative.

Oil Industry

India, China and the United States meet the world's demand of oils. Of the three, both in the variety of the oil-seeds and in the quantity of the out-put India stands

foremost. While the annual production of oil-seeds of China and the United States is slightly over five million tons, that of India amounts to nearly seven millions. In the production of cotton seeds she stands next to the United States while her ground-nut production is about two-thirds of the world's.

But her recent exports have fallen far below the pre-war level. During the recent years the United States, Canada and Russia have started growing linseed, and India's export of the cereal has fallen to 10 per cent. The soya bean raised in China and Manchuria is dreadfully competing with our ground-nut in the world market and fast driving it to the back-ground.

Except in this most unfortunate land nowhere else in the world either in America or China do people export oil seeds in a raw state as it would impoverish the soil, and intensify the problem of unemployment*. India is the largest exporter of oil-seeds. During 1929-30 she exported about 11,95,000 tons valued at Rs. 2, 646 lakhs of rupees.

As the reader is aware the cake is the cheap and effective form of soil fertilizer. Again, the cake of some varieties is a nutritious food for cattle, the source of strength of Indian agriculture. Moreover, oil forms an important constituent in the Indian dietary. The annual import of vegetable ghee from Europe is about two crores of rupees, and this is partly used for adulterating pure ghee, and largely for consumption by the poor.

Oil-milling has great potentialities. The processes are simple and easy. We have plenty of raw materials, cheap labour and extensive market. The industry is closely connected with agriculture, and fits well to fill in the gap of idle seasons of the year. The output of old-fashioned 'Ghanies' drawn by bullocks is no doubt large. The method is slow and inefficient. A large percentage of oil is left in the cake, which when used as food, cattle cannot assimilate, and when used as manure, may prove positively harmful.

*Vide the article by Mr P. D. Nair, M.A., D. Ag., Nagpur, College of Agriculture, in the 'Leader' Allahabad, March 1932.

The power-driven mills, small and large of which we have already 200 in number, no more than the old-fashioned 'Ghanies' are leading a precarious existence. The reason is that milling-industry, whether on a big scale or on a small one, cannot thrive unless side industries such as soap-making, paints, varnishes, lubricating oils, axle-greases make use of the oils. The problem of oil-milling is related to, and dependent on the development of other indigenous industries of which it is a component.

The Industrial Commission and the Royal Commission on Agriculture have recognised the importance and the necessity of developing the industry and recommended it to 'the earnest consideration of all local governments'. Though nothing has yet been done to put the industry on a sound economic basis, the Imperial Council of Agricultural Research has given its serious consideration to the matter as the industry is one that adds to the fertility and productivity of the soil, and solves in part the problem of cattle food and mass unemployment.

Salt

It is a necessary of life and its consumption is more general than any category of food. There are people who do not consume rice, ragi, or wheat, but nowhere do we find any through the vast length and breadth of this country who do not make use of it. High and low, rich and poor, prince and peasant cannot do without it. It helps healthy growth, adds to taste, and aids digestion*. For the healthy growth of animal and plant life it is considered no less important.

The salt mines of Sind and Jeypore furnish large supplies of rock salt. The kind and quality of the salt we get from Khewra, Sambhar and Pachbadra is appealing both to the eye and the taste. Moreover, with a sea-board of about 4000 miles and a climate, hot and dry for a long part of the year India has great natural facilities for its production.

*Medicines that work on indigestion compounded of different salts in Ayurveda.

The industry has declined as it is unable to compete with cheap foreign salt. In Bengal specially the imported salt has made greater inroads on indigenous production. That province is not so favourable for the manufacture of salt as other provinces are. To begin with, the dampness of the climate, and the large volume of fresh water discharged into the Bay of Bengal by the Ganges and the Brahmaputra tell against successful salt manufacture. But in Orissa it was not till 1898 that the manufacture was finally abandoned. Midnapore and Jessore formerly manufactured salt. Now small quantities are prepared at Bihar, Bhagalpore, Monghyr and in the vicinity of Calcutta as a by-product in the saltpetre manufacture. In several parts of Bengal and other provinces it can be taken to as a cottage industry and made by natural resources without depending on Karachi, Aden* and other places.

The Tariff Board appointed to investigate into the matter found for a fact that the demand for Liverpool salt has dwindled from 75 to 15 per cent. and expressed the view that India can produce salt of the required quality for Bengal. The present production of Okha and Karnatic, which is 15,000 tons can be increased to 1,50,000 tons, and the out-put of Khewra, Sambhar and Pachbadra can be increased so as to suit and meet Bengal market. The railway rates are to be reduced so as to stabilise the prices in Calcutta.

The annual import of white foreign salt into Bengal and Burma totals 6,00,000 tons. If proper care is taken in the making of salt-bed, scrapping, collection and storage, Indian salt can be improved in colour and quality to the level of foreign salts. As the Board concludes, it is by protection and bounty, by reduction of railway freights, and by popularizing the salt of Khewra and Sambhar, and increasing their out-put by the control of imports that this industry can fully be developed and foreign salt entirely replaced.

*Vide Modern Review, August 1931. Salt in Bengal, P 139 by Mr. Hemendra Prasad Ghosh.

Mercantile Marine and Industrial Unemployment

The volume of India's exports and imports is very large, and the exports far exceed the imports. Consisting of raw materials and products such as cotton, jute, wheat and ground-nut, which are bulky and voluminous, our exports occupy more shipping accommodation than our imports, which are finished articles, compact in size and dense in volume. A wagonful of cotton exported would bring in a boxful of cloth. The inward and outward shipping is through foreign vessels, we having few of our own. Every year towards freights we pay over 50 crores of rupees. A small fraction of this vast sum goes to our people. It is largely pocketed by the American, the French, the Italian and the Jap.

The ships that come to carry our exports are being laden with salts, old newspaper bales, porcelain chips, Italian marbles, preserved fruit, and potatoes as a make weight (for an empty ship does not move on the deep) and sell them at low rates in the country. Worse still, the foreign shipping companies have till very late been outside the pale of the income-tax laws in India. Registered abroad their assessment is different and low.

And this in spite of the natural advantages we have. In cedar and teak we have two fine varieties of wood for construction. Labour of a cheap kind we have in plenty, and for want of work at home, many of our labourers have to go to Burma, Africa, Malaya and Kenya to work under most trying, sickening and humiliating conditions. Capital and organization thanks to our Parsi brethren we cannot be said to lack in. In the words of Mr. Sarabhai N. Haji M.L.A., of Bombay "A country set like a pendant among the vast countries of the old world, with a coast-line of 4,000 miles and with a productivity of numerous articles is by nature meant to be a sea-faring country."

The Indian Mercantile Committee, which the Government appointed submitted its recommendations in 1924. "It observes that in the interests of the growth of an Indian

Mercantile Marine it is necessary to close the coasting trade of this country to ships belonging to the subjects of foreign nations. Countries like America, France, Italy, Japan and Turkey have enforced this principle of reservation of their coastal trade." These countries carry on their trade in their own vessels, for fear that a contrary policy would undermine their naval strength and power.

The coastal shipping Bill introduced by Mr. Sarabhai N. Haji was looked upon as an enormity unequalled in the commercial history of nations. But history is full of such enormities. Even Great Britain was not a free trader all through. The Navigation Act of 1651 enjoined that exports and imports should be carried in English ships alone. It was not till two centuries later when she felt sure of her undisputed supremacy of the sea that she repealed the Act in 1854.

The British Shipping has received and still receives state aid in various forms such as the Appropriation of Naval Reserves, Admiralty Subventions and Government loans at low rates of interest*. "The British coasting and Near Trades' ship owners Association, hitherto a staunch Advocate of Free Trade, requested the Government for protection of coastal trade in consideration of the present state of affairs, and to exclude all foreign vessels carrying cargo from one British port to another." "In the opinion of the Association this is the only way to protect British Shipping Industry from unfair competition and assist a national industry to recover a reasonable measure of return of labour and outlay, and deepen the operation of an industry, which was essential to the nation's well-being and security.**

If England, the mistress of the sea, after decades of a policy of 'let alone' now feels the need for reservation, it needs no argument to say that in our case the need is all the greater to solve the economic ills of the land.

*The case for Indian Mercantile Marine by Mr J M Ganguli M. Sc, LL. B
Modern Review Sep 1928.

**Vide Modern Review, August 1931, Page 243.

CHAPTER V

THE REMEDY FOR EDUCATED AND INDUSTRIAL UNEMPLOYMENT

THE classification of industries into those that solve agricultural short employment and those that solve educated and industrial unemployment is sought for a clear understanding of the subject, but never meant to be exclusive. The several agricultural and allied industrial problems do in large part depend upon the intelligent guidance of educated persons on scientific lines. While cloth, silk, sugar, fruit and other industries largely make to fill the void of enforced idleness of the farmer during slack seasons, these can never make any appreciable progress without improved methods and intelligent direction, which the trained intellect alone can bring to bear upon.

The making of chemicals, chemical products, metallic utensils and other household articles presupposes an amount of scientific knowledge, training, skill and experience which are not within the reach of ordinary individuals. Solution of educated unemployment lies in the development of these industries. It does not mean that industrial labour has no place in it. The labourer and skilled workman are and should always be there, but the actual worker, the organizer and the manager must be men with practical scientific knowledge and trained brains.

Science has revolutionized the phase of the modern world. It is the basis, the foundation of its economic fabric. Minus science and what it has done, modern civilization has little to boast of. The railway, the telephone, the radio, the car, the steamship, and the 'plane, have annihilated time and distance. In the matter of production machinery has increased the quantity and quickness of output to an extent until production has outstripped all demand, and has in part to be destroyed so as to avoid gluts and prices below cost level.

Science is invoked to make use of things, which were once not only useless but highly injurious and repugnant to health, smell and sight.

Tar formerly thrown into rivers to putrefy and pollute the air is now raw material for producing beautiful dyes, some of our most valued medicines, a substance three hundred times sweeter than sugar, (saccharine) and the best disinfectant for the destruction of the germs of the disease. The Germans are taking tea sweetened with sugar made from waste-wood and saw-dust, and eating delicious margarine made out of smelly whale oil, which twenty years ago the candle and soap makers would not have dreamt of using because of its evil smells. Beautifully scented soaps are to-day made from fish oils which were once unmarketable owing to their odour, while in soaps of inferior grade fats of animals, of dead carcasses and of human excreta form a part. Besides, solid coal is converted into gas, and gas into oil and pumped to storage tanks above ground. Though the process was known to scientists, the early methods were so expensive that they were of no use beyond the laboratory.

Science has demonstrated that Nature's plan is purposeful, and that there is nothing like waste in the world. The word "waste" may, scientifically viewed, be said to have lost its meaning. With substances, which once found their way into the dust bin, articles of every-day use are being made. In the Far East plastics are made out of the oil of soya bean. In the West a liquid called furfuraldehyde is distilled from straw and oats. From glycerine plastics are made to coat and preserve rubber. Celluloid made from paper and cotton rags is converted into gramophone records, films, artificial jewels, combs and fancy articles that are inflammable. Paints and varnishes made from plastics are driving the linseed products off the market. Whereas the old linseed oil variety takes several days to dry up, these dry up in a few hours.* The Sunralite produced by the Sunralite Co., Tottenham London is a substitute for glass specially suitable for factory roofs.

*Mr Norman Ginsbury in the Daily Express.

skylights and windows.* Waste glass is made into blocks suitable for road surfaces. They are so hard that they are practically indestructible no matter how heavy the traffic.**

Science has worked many miracles and may many more hereafter. Our grandfathers would have refused to believe them. Even today they savour almost of black magic to most of us.

In India owing to the apathy and indifference and the lack of a spirit of research, not only waste matters are not properly used but things that are useful are now a waste. If our manifold agricultural and industrial problems are tackled with a true scientific mind much of what is now a waste can be converted into many useful things that we need. A practical knowledge of the processes of tanning, for instance, enables us to avail ourselves of the large variety of raw hides and skins, which are now being exported to foreign lands. The bark useful for tanning is either exported in part for a nominal price or remains a waste. The bone now a waste can be used for distillery purposes or converted into a kind of artificial manure. Out of the large abundance of our forest produce, wood, bark nuts, medicinal plants, herbs and roots, which now wither to waste, ships, railway carriages, green manures, drugs, oils etc., can be prepared.

But as the irony of it is, while science has on one hand rendered waste into use, it on the other by largely dispensing with human labour has made it a waste. In the wide interests of the country while we welcome science, we must be on our guard against the over-powering mastery and tyranny it is wont to exercise.

According to the trade figures for 1927-1928, a normal year, the annual value of chemicals and chemical products total about 28 crores of rupees. Of these

Dyeing and tanning materials	come to	2'65	crores
Glass and Glassware	...	...	2'48 "

*Indian Review October 1982, page 747.

** do do December 1982, page 899

Drugs	...	...	...	1'98	crores
Paper and paste board	...	...	...	3'00	"
Watches	...	...	...	0'39	"
Earthenware and porcelain	...	...	...	0'81	"
Soaps	...	...	...	1'61	"
Chemicals	...	...	...	2'64	"
Artificial silk	...	...	...	5'48	"
Manures	...	...	...	0'47	"
Paints	...	...	...	1'54	"
Cement	...	...	...	0'64	"
Other Requisites	...	...	...	0'62	"
Liquors	...	...	...	3'67	"
Making in all a total of				27'99	"

These industries can be run on a moderate scale in our cities and towns scattered throughout the country. The value of no particular kind exceeds five crores of rupees. These will absorb a large number of the unemployed and help those town-dwellers who have the requisite leisure and training, but no work to do. In a country like India with a teeming population of varied tastes and wants a wide and steady market is ensured so long agriculture and cottage industries are prosperous, the bulk of the population rich, and their purchasing power great. There will be little fear of congestion of towns and no fear of unemployment.

The Tanning Industry

India is rich in live stock. Of the 600 million cows and calves in the world India is estimated to have 110 millions, of the 47 millions of buffaloes she has 34 millions, of the 304 millions goats she has 53 millions, and of the 575 millions of sheep and lambs she has 41 millions. Shortly put, she possesses 1/5 of the world's cows, 3/4 of the world's buffaloes, 1/6 of the world's goats and 1/9 of the world's sheep, not to speak of the large number and variety of wild and aquatic animals in her forests and waters.

Our hides and skins export is one of the most important trades. Even the most conservative estimates show that India produces 25 million pieces of hides, 14 million pieces of goat skins and 12 million pieces of sheep skins. The annual value of exports total about 40 crores of rupees, while imports of finished articles come to 18 crores.

The quality of hides and skins has much to do with the breeding, feeding and keeping of cattle. If high quality is to be secured, provision is to be made against diseases, insects, vermin, wounds, injuries, old age and untimely slaughter; and the methods of preparation, cure and preservation are to be improved. There is still a wide field for original and adaptive research to improve the raw stock. Farble flies do greater harm to cows and bulls than to buffaloes as they often get into water. They spoil the raw stock. As the goat is not an important animal in Europe or America, the vermin infesting it is yet to be studied. By grants and aids to institutes like the Imperial Council of Agricultural Research the state can do a lot in the cause of cattle and the industries allied thereto.

The state can extend its help to leather institutes at Calcutta, Madras and Cawnpore to carry on research in the several processes of preparation, cure and preservation of the stock. It can do a lot by imposing duties on the export of hides and skins to foreign lands thereby preventing reckless slaughter to relieve an urgent want unmindful of the great loss to agricultural interests. The export of high grades of cows and she-buffaloes may be prevented by duties imposed so that the number of milch animals may not go low, and out of the income it may set apart a portion without any drain on its resources. With the help of the rich private initiative may do the rest. The farmer may be made familiar with small crushing mills for preparing bone meal out of the bony parts of the dead animals, which now go to waste.

Cattle-hides produce leather for trunks, suit cases, bags, straps, belts etc. Our goat skins are among the best in the world and furnish finest kinds of upper leather for making

costly shoes while sheep skins are used for lining leather. Besides, with sheep, goat and reptile skins, many fancy and luxury articles are prepared.

Tanning materials we have in plenty. The Turvar bark though limited, is fine in colour, and works speedy tanning. The *babul* bark, which is not inferior to any other, is largely exported to foreign countries. The beef-tallow, the fish oil, and other varieties of vegetable oils, and animal fats necessary for the manufacture of leather are all available on a manufacturing scale.

But we have no tanning machines, our methods are crude, and acids are not all available. The European and American tanning processes may not suit our climatic conditions and local requirements. They are to be modified by a systematic research of the processes carried on our soil so as to suit us. It involves chemical and physical reactions, and requires an amount of scientific knowledge.

It is a most ancient industry dating back to the days of the Rigveda, and followed by our Aryan forefathers. But as time rolled on the high-caste men have come to spurn it as mean with the result that we find the *chamars* alone following it. The number of our *chamars* alone comes to 16 millions. Some of them still possess considerable hereditary technical skill in leather manufacture; and if trained a little, are capable of handling modern appliances.

The development of the industry means a lot to the country and millions of our under-paid half-famished *chamars*.

Let not a false sense of dignity stand in the way of the youth and this much decried industry. If it is really mean, why have our Aryan forefathers followed it, and the Vedic hymns have a place for it? Have we for this reason disowned our forefathers or scorned the Veda as defiled and unholy?

We cannot afford to neglect the industry, and yet hope to work out our social and economic salvation. The Government of Bengal has opened a Tanning Institute in Calcutta. It trains expert tanners, leather chemists and skilled workmen

in leather manufacture, and demonstrates improved processes to local tanners.*

The Glass Industry

If coal and steel are the foundations of modern civilization, glass may be said to be its decoration. It appeals to the refined taste of the modern mind. It keeps the house neat and tidy, sparkling and glittering. An article of luxury though, it is used by all classes of people. The *almiras*, the window panes, the electric lights, and the fancy paper weights of the rich, the chimney, the jug, the jar, the cup and the saucer of the middle class people, the bottle and the bangle of the poor are all of glass. The scientists experimenting in tubes, the astronomer with his head up to the heavens for the invisible star through a telescope, and the biologist tracing the movement of the bacillus through the microscope do all make use of glass.

The preparation is not easy and simple. It requires scientific knowledge and practical wisdom. The industry is in its early beginnings in our country with fifteen factories and 2,022 workers. The number of our factories does not form one twentieth part of those of Germany or Japan. Of these factories Calcutta has seven, Bombay four, Poona two, Howrah, Hyderabad, Agra, Bijnor, Jubbulpur, Moradabad, Nagpur, Satara, Sahapur one each**. With one for each district the number cannot be too great considering the vastness of the country and the demand for glass.

The raw materials such as calcium, potassium and lead, are available in the country with the exception of sodium carbonate which is imported from England. The expert opinion was that the climate of the country did not suit the industry. Subsequent events revealed that climate is no bar and that state help is necessary in the early stages of the industry.

*Indian Tanning Industry by Dr B M. Das M.A., (Cal.) M Sc.,(Leeds)

Amrit Bazar Patrika 25th September 1939.

** Glass Industry in India by Kamesh Chandra Ghosh B.A., Bcom (Hons) Amrit Bazar Patrika 25th September 1939.

Sjt Antaji Damodar, a school-teacher in Dahānu at the instance of Lokmanya Tilak threw himself heart and soul into the work, and started the Paisa Fund Glass Works of Telegaon, Dhabada, a small town on the south east line of the G.I.P. Railway 98 miles off Bombay with a handful of Japanese "technical experts". The so-called experts were found to be no more than experienced labourers unwilling to impart the little they knew

Workers and technical men trained in the Paisa Fund Works started several factories in Mahārāstra and Central Provinces. In 1918 facilities were given to young Indian graduates to experiment on pottery and Chinaware. Their labours met with success, and to-day the company is manufacturing all kinds of jars, pots and retorts and baking clay jars. Experts trained here started works of their own. Orders from the Government, the different Railway companies and public bodies poured in. But the GIP Railway preferred to buy foreign stock at higher rate and did not show any the least concession in the matter of freights even.

The state and the munificent public are to grant a new lease to the mother company with a dozen offspring to her credit by instilling new life and vigour, and enable the educated youth to be self-supporting and helpful to himself, his family and his country.

The Drug Industry

The demand for chemicals is now greater than ever, a systematic cultivation, collection and extraction of drugs is of greater economic importance to us in view of the gradual extension of western medicines among the masses. With no costly laboratories of our day our forefathers experimented upon Nature's laboratories and recognized the medicinal value and efficacy of several plants and herbs. They embodied the fruits of their scientific labour for the future guidance and benefit of all such works as Charka Vābhata and the like.

A glance at the trade figures does not fail to impress on us the importance of the industry. In 1908-1909 we

exported crude drugs to the value of Rs. 15.5 lakhs against imports amounting to Rs. 73 lakhs. ' By 1928-1929 the value of drugs imported was 2 crores of rupees as against 24 lakhs worth of exports. While much of the raw material is going out for a nominal price, various kinds of refined drugs manufactured abroad are filling our market. The rapid increase in patent medicines during the last decade shows the extent to which our market is being exploited by foreigners.

And this in spite of the superb advantages we have. No country is so profusely gifted with medicinal plants as India is. The remarkable variety of climate, altitude and soil has through ages developed a wonderful flora, of which 12 hundred or more species have medicinal value. In our mountain regions and wildernesses we have an infinite supply of botanical drugs, medicinal plants and roots such as digitalis, cinchona, opium, indica, arnica. A large host of others grow, mature and die without being put to any use whatsoever.

We can raise Santonica as a regular plantation, and extract Santonium therefrom as the Americans do. India is the largest producer of world's tea, and the tea dust which is a waste with us is being purchased by America at a nominal price to extract theine. New Jersey has specialized in it and is the world's largest producer. The medicine is largely being made use of in Indian households, but with all that not a single concern do we find on our soil for this valuable medicine.

75 per cent. of the drugs consumed in America are produced on their farms. The educated Americans have a special liking for tilling the soil and are producing drugs of high quality with special methods of cultivation, collection, preparation, preservation and sale.

The use of ready-made imported medicines from abroad has rendered our medical men less resourceful and less reliant, and reduced them to the position of mere agents, unpaid, though intelligent and effective.* They lose all originality and

*In the Homeopathic schools of medicine, degrees are got at a nominal expense without the ordeal of a regular examination—the object being not to train real doctors, but to manufacture effective agents for the sale of their medicines here.

initiative dependent as they are on foreign medicines of whose composition and preparation they have no knowledge. Moreover, as seen in connection with cattle diseases indigenous herbomedicines can be supplied at much cheaper rates than imported foreign medicines.

Private enterprise and individual initiative go a long way. The selfless efforts of the late Hakim Ajmal Khan to secure a share in the drug industry for our land is specially praiseworthy, though he did not live long to see them materialize.

With the benevolence of the Punjab Government the Board of Trustees of Ayurvedic and Unani Tibbi College, Delhi, opened a research institute for chemical investigation in Indian medicinal plants with a view to translate the results of research work into commercial enterprise. Why not our Universities of which we have had a blessed lot, each open an institute of its own and do something substantial for the material progress of the country? They can thus open new careers for our youths in search of a livelihood.

Facilities are to be given to men of good scientific education to get suitable training in America and Germany in the technology of the industry so that they may prove their talent hereafter.

The opening of botanical gardens and farming of medicinal plants on a commercial scale is the first step in the direction. It is not merely an industry in which we can with diligence be self-sufficient and save a crore or two. We can carry it as a lucrative business, and no country can ever hope to cope with us. It is an industry with great scope for future activity and development. It is a creative process that would along with some others widen the basis of our economic status, increase our material resources, and make the new generation self-reliant, happy, wealthy and worthy.

Aluminium Industry

It offers a vast field for development. We annually import 2000 tons of aluminium worth Rs. 32,00,000. It is now one of the most important metals for modern warfare.

In the manufacture of aeroplanes, it is the chief material. It is estimated that 30 millions of Bauxite which will produce 7 million tons of aluminium enough to meet Indian demand for 3,000 years, is found in the country*.

The aluminium ware has greatly supplanted other kinds of utensils in the Indian households of the poor and the lower middle classes. The lightness, whiteness and cheapness of the utensils are a strong enough recommendation to the purchasing public. The raw aluminium imported from Canada, the United States, the United Kingdom and other countries mostly in the form of 'cirlces and sheets' is worked into utensils of various kinds, sizes and descriptions so as to suit different needs and fancies,

The British and Canadian suppliers of the material have come to possess many factories of their own; and factories, which were once in Indian hands, have passed into theirs. To monopolize the profits of trade European companies formed into trusts or cartels to supply the stock. Add to this, the Ottawa Agreement by 20 per cent duty on British, and a 30 per cent. duty on non-British aluminium has placed the British and Canadian factories in an unfairly predominant position. This spelt destruction to the Indian factories. For the supply of the raw material the Indian manufacturer is at their mercy in spite of the fact that raw material is available in abundance and can be worked at a very cheap cost.

Pottery

It is one of the oldest industries of the country. In the early Sanskrit writings the word *Kumbham* meaning a pot finds frequent mention. In the body economic of the Indian village the potter is or rather was an important member, and no village worth the name was without a potter as it was without a weaver of its own.

* Dr. Dutt, formerly Director of Geological Survey, Gwalior State in the course of an address under the Industrial Chemical Society, Benares Hindu University, October, 1934.

With the march of civilization however utensils made of iron, brass, copper, bronze, tin and lead with greater durability, finer polish and higher value have largely come to be substituted in its place. Khagra, Midnapur, Cuttack, Burdwan, Dacca and other places own small factories to make utensils.

We are today importing porcelain and earthenware of the value of 81 lakhs. The superior excellence, the supreme utility and the lowness of cost enables the pot to hold its own against all round competition from within and without. Though not comparable to aluminium or metallic ware in point of durability, it excels them all for preserving acids, liquid medicines, milks, pickles and such others. Preserved in metallic and alloyed vessels these lose in colour, taste and efficacy, and prove positively harmful to the system. When food is cooked in vessels, and the heat applied is over 200 degrees, a certain per cent. of the metal is wont to dissolve with bad effects however slow on the body.

From an economic and hygienic point of view the pot may be said to have great value. If scientific research is directed to make it more durable than it is at present, and art is to make it more attractive and less repugnant to refined taste, it is assured of a great future indeed. Even at the minimum of Rs. 20/- a village on the average, the total value of the output necessary will not be less than a crore and a half, providing work to many in the land.

Pisciculture

Though capable of being carried on in almost every one of our villages if properly well organized, encouraged and directed, the industry is more or less confined to the sea-coast, and a few inland villages here and there. The stigma attaching to this profession is in the main responsible for this sorry state of things. Fish do not appear to have been used by the Vedic Aryans* though stray references are not wanting to fish being caught in nets in the Rîg-Veda**. People carrying

*Rîg Veda VII 18, 6, X 86, 8.

**Rîg Veda VIII, 67, 1.

on fishery trade came to be classed under untouchables unworthy of association.

The sea holds within its bosom a living creation, which is perhaps as bountiful as the one we witness on land. 'The right of fishing in the sea is common to all subjects, and a prescription for such a right annexed to a tenement is bad.' Similarly there is no easement to catch fish in running waters.

Besides the sea and the rivers fish are found in lakes, tanks and ponds that never dry up or have water for the most part of the year. New varieties of young fish can be brought in, and reared largely in most of our villages. If full benefit is to be reaped, methods are to be devised to arrest the slip of fish with the surplus flow of water during periods of excessive rainfall.

The methods of rearing, catching, preserving and marketing call for an amount of knowledge and intelligence which the scientifically trained brain alone can bring to bear. As we have seen, beautifully scented soaps are made from fish oils, which were once unmarketable owing to their odour. Delicious margarine is prepared out of smelly fish oil. Vitalizing foods and medicines that work well on bad livers are made out of it, besides 'the fishmeal' composed of waste is of great manurial value.

The vastness of demand and the variety of uses it is put to assure it a certain market with a vast field of remunerative employment to millions of people educated and uneducated as well.

Forests

Forests have no small part to fill in the economic development of the country. Mitigating as they do the extremes of cold and heat, they have a most salutary effect on the climatic conditions. By replenishing the supply of ground-water, they hold under check the serious effects of droughts and floods. In his disregard for Nature man has been destroying this great reservoir. He carelessly cuts trees, destroys wild animals and birds for mere sport, and allows forests to

be consumed by fire. When rain comes in, there would be no vegetation to hold the soil back. Water sweeps over land, and rivers swell to over-flowing. Drought follows flood, and vice versa. The one is the evil forerunner of the other. Countless tons of fertile soil are taken down to rivers, and year after year we hear heart-rending accounts of lands and villages being swept off causing immense loss of life and property.

The deterioration of Indian cattle is in large part due to want of nourishing fodder. If fodders are grown over jungle lands we may hereafter have plenty of cattle food. Forests furnish fuel in our land much the same way as coal-mines do in England. The insufficiency of fire-wood for cooking purposes and against the winter cold is causing enormous waste of dung which is the most valuable of soil manures known and easily available to all

The experiments in America and the experiences from Africa have shown the importance and value of bird life for reaping rich harvests. We have seen in another connection how the wanton destruction of innocent bird life in the Nilgiris and on the Simla hills has reacted on the crop yield in the vicinity. The existence of large numbers of birds is the best safeguard against the ravages of pests and insects. Moreover, millions of rupees are being spent in every civilized state to preserve a large variety of strange wild life in artificial museums for man's joy and pleasure. Forests are sanctuaries, Nature's museums on earth intended for man's benefit and amusement, and God's glory. By reckless slaughter man is transgressing upon Nature's law. He thereby renders life a dull monotony with little variety, and brings in disaster on happy healthy economic existence.

In teak, cedar and other varieties, our forest have some of the finest qualities of timber that combine lightness with durability, and are of immense use for building purposes, furniture and construction of railway carriages, trams and ships. Today our paper industry suffers on account of the insufficiency of raw material, and we are importing it from

abroad. Reforestation will enable us to locally secure the required raw materials such as the bamboo pulp.

An infinite variety of plants, herbs and roots that have great medicinal properties are now a waste. They grow and die unused and uncared for in our jungles and hills. America produces Podophyllotoxin, a specific for liver complaints from *Podophyllum*. A fine variety of the plant is found in the Himalayas, and the Forest Department has been cultivating it in the Punjab, the United Provinces and the North West Frontier Province. It is found to be far superior to the American variety, and is threatening to monopolize world market in near future.

Chaul-mogra oil extracted from the seeds of a tree with remedial effect of a wide range is a more telling example. In curing leprosy it is specially found to be of great use. For centuries past its use was known in India though almost forgotten now. Buddhist works narrate the legend of a Burmese* king, who, being afflicted with this deadly disease, left the kingdom, cured himself by means of this oil, resumed kingly duties; and likewise effecting the cure of a young beautiful damsel he fell in love with, married her, and lived in happiness.

Till of late it was held in utter disregard by European medical men. But reason has the better of prejudice, and experimentation showed it to be the surest and most powerful weapon to attack the ravages of the deadly disease; and the oil relegated to the poor cottages of Malabar peasants for lighting purposes for want of a better use, now occupies a foremost place in the costliest laboratories of Europe and America. If instead of the raw seed or the crude oil being exported for a nominal price, the oil is scientifically prepared for use it would bring in plenty and prosperity to the very doors, where it is burnt to lit them with its dim flicker.

So long forest areas remain in private hands, there is little scope for growing and improving the same. As in the case of the railway, the telegraph, the post office and currency a common platform action in the wide interests of the country

*Even in the case of the Burmese king, the oil was not used in the impregnable forests of Burma.

is what is required if waste and reduplication are to be avoided and fruitful results achieved. The one feasible course is for the state to take on itself the conservation and reforestation work in the best economic interests of the country as a whole.

Protection against fire is the first and foremost work to do. New roads and trails are to be laid down, and fire guard stations installed to fight fires more successfully. War against insects and diseases that attack trees and cause enormous loss is the second. By rooting out some of the plant enemies and checking the spread of others, the natural forest resources can best be preserved. Flood control and soil erosion is the third. For this check dams are to be built in the deeply eroded areas, and bate hills and dales and wastes are to be planted with useful trees to furnish an "effective forest cover" and "valuable vegetable sponge" to hold the soil in

After long neglect the U.S.A. has risen to a sense of the importance and value of this kind of work. Forest improvement and reforestation is in study progress affording employment to a civilian conservation crops of 3,00,000 youngmen! Because of the many similarities we have in common with the great American Republic we have much to draw and learn from the state. A well organized forest department will offer appointment to quite a larger number of our jobless youngmen instilling into their emasculated bodies and dejected minds new life and vigour, fresh hope and joy with a great promise of permanent future benefit to the nation at large.

*Dr. Sudhendra Bose on the Conservation of Forests U.S.A



PART IV
MONETARY PROBLEMS

CHAPTER I

MONEY AND BANKING

THE word 'Money' is defined by different writers in different ways. The definitions notwithstanding, the word lacks the definiteness and precision of scientific terminology. Can cheques, bills, paper currency, and promissory notes be included in the word ? It is the expression of value in terms of a common commodity instead of in terms of other commodities sought in return. Instead of saying that a chair is worth two benches or five books, we set a money value on it say Rs. 5/- and call it price. Books or benches all may not need, and many may refuse in exchange for a chair or any other article. But none will refuse to accept money in return for anything parted with. Universal acceptability is the chief characteristic that distinguishes money from the rest. Every people that have passed the primitive stages of civilization do feel the need of a common language of value. They measure and express the value of all commodities by means of a standard known and common to all.

Barter

But if everyone values goods in terms of those he wants to exchange, the language of values peculiar to him is unintelligible to others, and the knowledge does not go beyond the value of goods exchanged. This method of valuation however inconvenient is both natural and the one possible in all early societies. Before money came into use as medium of exchange, people satisfied their simple wants by exchange of goods for goods. Later on, the most esteemed article was chosen as the standard to compare and express the values of articles in use. Cowries, cattle, wheat and tobacco served the purpose at some stage of economic development before coins came into use.

The etymological meaning of such words as 'purchase', 'pecuniary', 'impecunious' take us back to the days of barter.*

Barter imposes severe limitations. A coincidence of wants is a pre-requisite for its success. The person, who has clothes with him and wants shoes in exchange, must not only seek the man having them, but willing to part in return for clothes. Mere coincidence of wants does not always lead to exchange because of the inequality and difference in the things to be exchanged. There can be no exchange, for instance, between a person having shoes, and willing to part them for a cow for the reason that none would need many pairs of shoes or could divide the live animal to equalize values. When wants are few and simple, and trade is slow, barter might have a place. It is a great hindrance to commercial progress and industrial development. The value of every commodity must be expressed in terms of every other that a society has involving great arithmetical calculations, and long catalogues.

Shells, wheat, tobacco and others lacked the essential features of good money. They would not store well, and last long. Nor did they combine great value in small bulk.

It was not till metals came into existence that trade and commerce have grown, and wealth accumulated. The greatest drawback for the accumulation of wealth is the want of a durable commodity that would stand the ravages of time. The substitution of metallic money simplified matters, and rendered commercial transactions safer and easier. It is the simplest and surest way of ascertaining and expressing the value of everything in the world. It leaves no scope for the different values that persons are apt to place under a system of barter. For purposes of trade a convenient currency

*The word 'purchase' is from a double word in Anglo-Saxon 'Pur'-'Chase' meaning the object of chase or hunt. It came to mean the game, the animal hunted, and later on things got in exchange for hunted animal. The latter two words are of Latin origin and connected with Sanskrit word 'pastu' which formed the wealth of pastoral or agricultural Indo-Aryan and Latin Aryan tribes. The Hindi word 'Paish' has something to do with Sanskrit root-word. The word 'Sammulu' meaning cattle as well as money in Telugu is no less significant.

is as essential as up-to-date methods of production and transport. The great progress which commerce has made in recent times is no less due to an exact convenient currency than to any other factor. In commercial transactions money is sent to long distances either by mail or freight. A heavy bulky substance might serve well for small internal exchange purposes, but not for large payments in distant lands. For retail trade and small purchases it would be useful. But in all big transactions a commodity possessing great value in small bulk, and capable of easy and safe transport answers the purpose.

The commodity must be hard and durable. If it wears easily, it would lose a portion of its value, and would not be accepted. If it is perishable, it would not do well for hoarding. It must be certain in value. If not, the person receiving it is not sure of what it is really worth. He would either hesitate to sell his commodity or raise its price to a degree sufficient to make up possible loss. In either case trade would be under a serious handicap. It must be easily recognizable and universally acceptable. Otherwise, frequent mistakes and fraudulent practices would become common, and rapid exchange would be delayed or retarded. It must be divisible so as to arrange for equivalents of any value.

Gold and silver are the two metals that fulfil the conditions. They are hard and durable. They combine great value in small bulk and are adaptable to the art of coinage. Slightly hardened by the admixture of other substances they would endure the wear and tear of modern commercial usage with but little loss of substance, and can be stored for any length of time without fear of destruction or deterioration. The growing volume of foreign trade has given silver a place next to gold in the business world. For making small payments silver is used. In all big transactions its weight is an impediment, and its transport is difficult and expensive. Gold answers the purpose whenever large payments are to be made, but it is of no use for denoting small values. Compared with the other metals the values of these two have been

remarkably steady over long periods of time. With no clash each supplements the other in the business world, and together render a most signal service to a progressive society.

It by no means follows that other metals have no monetary use at all. Invaluable and indispensable though they be to meet the ever expanding needs of modern states, gold and silver do not of themselves fulfil all the functions of a sound monetary system. Copper, bronze, nickel have a part to play however humble it be in internal transactions of small value.

Coins

A sovereign, a dollar or a rupee does not express exactly and clearly the value of small articles. For our daily demands copper, bronze or nickel coins serve the purpose better. In modern transactions the difference between buying and selling price is often so small that a few cents or pies added to or subtracted from each standard coin would mean either riches or ruin to the businessman. The medium must therefore consist of such a variety as to make possible the transfer of an exact amount agreed upon by the buyer and the seller.

However pure and valuable, metals as they are, they do not serve the purpose unless done into what are called coins. What a coin is, who is to issue and what are its essentials is our next concern. A coin is a piece of metal or combination of metals with a stamp indicative of its weight and fineness, and other devices and designs to prevent clipping, sweating, and counterfeiting. Coins of different denominations are issued to measure values easily and exactly. With values stamped on the face they are distinguishable by their size, colour, design and other features. A coin ensures accuracy in value and rapidity of circulation. The stamp set on it is a guarantee of its weight and fineness. It dispenses with the need to weigh or estimate its value at any particular time as the taking of a metal would involve. When commerce is carried on a large scale, a slight loss for want of accuracy in each

exchange or a change in the value of the medium would lead to ruin.

Standard and Token Coins

Money is of two kinds: token and standard. The term 'token' is applied to those coins whose face value differs from the intrinsic value. The face value or the value set on the coin is higher than what it is intrinsically worth. The value of the material in a copper or nickel coin does not correspond to the value that the coin bears. From the silver rupee down to the copper pie there is difference between the value which the seal of the state has set on it, and the actual value of the thing it consists of. The face value of a rupee is sixteen annas, while the intrinsic value, the actual metallic content of the coin ranges from ten to twelve annas. A standard coin has no such disparity. The intrinsic value corresponds to the face. The sovereign, the franc, the mark, and the dollar are worth what they really are with little difference, if any, between the face and intrinsic values.

A token coin is 'limited legal tender'. A two-anna or one-anna nickel piece or a copper coin of lesser denomination are legal tender limited to the extent of a rupee. Nobody is under a legal obligation to receive payments for any amount exceeding a rupee, and none as a matter of right can insist upon. The standard coin whether of gold or silver is unlimited legal tender with no limit set, and none can refuse to receive payments in the same. In every state the ratio between the token and the standard coins is fixed. The proportion remains the same but for occasional disturbances. In India during the busy months of the year token coins are in great demand to meet the wages of labour. There would be a rise in their value with the result that the rupee changes in the market at a discount. But with the Government the proportion remains unimpaired, and at every office of issue a good rupee always fetches the same number of token coins. Nowhere in the world a token coin is a standard one as well except in India. Token coin though, the rupee

is a standard one as well, and performs the functions of both. How it acts and reacts on our external and internal trade and on general price level we will discuss later on.

Seigniorage

The process of making coins involves a certain amount of expense to the State. Whether the State should charge any thing for working bullion into coins is a disputed point. It is sought to be supported on two grounds, that it acts as a check on melting and exporting of coins in the shape of bullion; and that the State should receive a recompense for minting. The second point is void of substance. The actual expense involved for maintaining a mint is a trifle not worth worrying about. The charges may well be met from other sources of revenue. As to the first it is to be noted that commerce has now 'skipped local and national barriers and has come to acquire a world market'. If the object is to facilitate it, there should be no such artificial barriers as seigniorage. In the United States of America minting is free and open to all. A free movement of precious metals from individuals to mints and vice versa is a sound policy. Money should naturally and automatically expand and contract so as to answer the economic needs of the people. In India, the demand for money is not the same all the year through. It rises in the months of November and December when rents of land and interest on capital borrowed are to be paid, and other obligations are to be met. Seigniorage is a bar to natural adjustment of money to a rising or falling demand. In foreign trade especially it imposes restrictions with serious consequences disastrous and detrimental to the country. The coin of a country is legal tender within its confines, and whenever payments are to be made to states outside they generally insist on their being made in bullion. Obstructions lead to artificiality and to a lack of stability in the business world. The free use of gold in the payments of balances and the freedom of its movement from country to

country has confined the question of seigniorage to gold alone. The opening of free mints for private individuals or companies to convert bullion into coins as and when they feel the need for it has now solved the question in every advanced state. In India mints are closed for private coinage. The reason given is that the habit of jewel-wearing is so strong that in case of absence of restriction on conversion there would be no money left in circulation. The restriction imposed ensures a proper distribution of metals for coinage, artistic and ornamental purposes. For a mere possibility of a contingency, which may or may not come true, the country is often in an anomalous situation with too much of unwanted money when not required, and too little of it when it is in sore need leading to unstable markets and artificial prices.

Gresham's Law

It is but the simple expression of universal experience having its basis in the commercial instinct of men. It urges man to make the most of his money. When he has with him old worn-out coins, he tries to pass them on as early as possible. Shortly put, the law is that bad money drives the good out of circulation, the old worn-out coins the new ones, the less valuable the more valuable ones. When gold and silver coins are in use, but if for any reason the value of either metal is affected, the law comes into operation. Grant for a while that gold and silver are unlimited legal tender and that a sovereign is equal to Rs. 15/-. So long the values remain at the ratio fixed, everything goes the right way, sovereigns being used to make large payments and rupees small. No difficulty is felt, and no distinction made in business transactions. If on account of over-supply or under-supply the value of either coin rises or falls in terms of the other, the market ratio changes that of the mint remaining as ever. If sixteen rupees come to be equal to a sovereign instead of fifteen, people make use of silver coins and hold back gold coins for future use. If the depreciation is definite and easy of calculation, the interference with price level is but little. If it is uncertain and due to speculation, the

loss is great and the consequences serious. Paper currency is of that kind. When there is an over-issue of paper currency or when the people lose confidence in the body responsible for the issue of the same, people take advantage of the legal tender law and make payments in paper alone. They take to conversion and hoarding. Gold and silver coins would speedily disappear from circulation.

We value money because of its power to purchase and make payments. Otherwise, it has little or no value. It is a means, a medium, and a go-between in all transactions. So long one kind of money, say, silver or paper serves the purpose, it is as good as any other. We are not concerned with the intrinsic value, the metallic content of the coin or the inherent value of paper. It is only the force of habit that makes us indifferent to the actual value of money used. But when it comes to a question of hoarding, the matter is different. The metal that is attractive, popular and highly valued is chosen for the purpose.

Whenever the law operates, it causes inconvenience and inflicts loss. It is difficult to realize the advantages of a complex currency. If gold or silver coins disappear from circulation, society suffers for want of suitable coins for making large or small payments as the case may be. When coins of any kind go out of circulation, they must be replaced by some other if trade is to continue. When depreciated paper money drives the rest out of circulation, the evil inflicted on society is two-fold. There would be no coins for purchases of any kind great or small and prices would adversely be affected. When speculation follows depreciation there would be no limit to the resultant harm.

The law is in full force when there are two standard metals with the "legal tender quality" conferred on them. When gold and silver circulate side by side as a double standard, a rise or fall in the value of either metal may usher in the apprehended result. Bi-metallism, as it is called, is now no longer the rule. Many countries have become mono-metallic, gold has become the single standard and the other metals are

subsidiary to it. The law is likely to grow in importance, if as a consequence of the increasing agitation in some enlightened economic circles, bi-metallism is again adopted as a solvent of the world-wide trade depression and as a supplement to the dearth of gold. There being no obligation on the seller or the creditor to accept payments in limited legal tender, and mints being closed for the coinage of the white metal, the standard coin must necessarily be parted with, and cannot be withheld from circulation. Further, the quantity of the metal in a coin is reduced so that the intrinsic value falls short of the face, and conversion into bullion would mean positive loss, there would be little temptation to convert. Even granting that the value of gold falls in terms of silver, and one sovereign fetches fourteen rupees, people will naturally part with sovereigns and keep back rupees till times get normal. But conversion there would be none as a sovereign is worth a sovereign whether in the shape of a coin or melted into gold; and in the case of the rupee the metallic content being far lower than the value of the coins, there is a positive loss on every coin converted. Again, over-supply of metallic coins or paper money will lead to depreciation, which an intelligent manipulation of currency can avoid. The lowness of the metallic value of token coins does not matter so long they are redeemable at their face value in the standard coin. The lowering of their intrinsic value does prevent their disappearance from circulation without in the least interfering with their circulation at par. And as to gold, the restriction on the number of token coins and their legal tender quality to small payments keeps it in circulation as it is indispensable in all big transactions, internal and external.

Bimetallism

Where gold and silver coins are equally manufactured with no preference shown to either, the monetary system is said to be "bimetallic". The ratio between the two metals is to be fixed, the metals are to be minted at the ratio and the

coins issued must be unlimited legal tender for all payments private or public. In the light of the rule there is now no country which is bi-metallic. The matter is more or less of academic interest till of late. But as its exponents suggest it is a remedy to the world's economic ills, we cannot slur over the subject as of no importance. England is not bi-metallic because silver is not unlimited legal tender, and India is not because mints have been closed for both the metals as long as 1890. The number of states with the gold standard is on the increase, silver being replaced by gold. China is a silver standard country. India is neither a silver standard country like China nor a gold standard one like England, America or Japan. For all internal purposes silver, though a token coin is the standard; and in matters of external trade and for purposes of foreign exchange gold functions, and the resultant mixed standard is called "the gold exchange standard".

If every country has gold standard or silver for all internal and external trade, there is no difficulty at all. But since some have gold, and others have silver, the ratio fixed for purposes of exchange is unnatural and harmful. The exchange ratio between the two standards does not, and cannot conform to the market ratio, which often fluctuates with every change in the supply or demand of either metal.

Let there be one standard in country, and there is no room for this state of things. Which is it to be, gold or silver? With the states that have already gold as their standard it is a matter of personal pique and national honour, and they would have gold and gold alone. The objection raised to all having gold standard is that the World's supply of the metal is too small to function as the standard in all countries. This leads to a shortage of standard money, and it is not possible to mitigate or neutralize the effect of changes in the value of gold and silver through mutual readjustment. Besides, monometallism causes great fluctuations in prices adversely affecting industry, agriculture, trade, employment, and income. As the external obligations of India are to be met in gold alone, decline in the gold value of silver means an increase of

the burden since gold purchases at the high market rates are to be made for the purpose.

The question of price of gold and silver is not one that individually interests a few economists or countries, but it is a general problem with which the world has to cope if international trade is to revive and be put on a stable basis. Gold and silver—the one with its rare value and high price, the other with its super-abundance and low price—are to be reunited after a long separation to function side by side to relieve the world's economic distress. Bimetallism is looked to as a powerful weapon wherewith to fight the instability and uncertainty of national and international markets. Today trade suffers because of the difficulty of fixing the par of exchange between gold and silver standard countries. It is urged that the increase in the use of silver, and decrease in the use of gold for monetary purposes tend to bring the two ratios together by raising the value of the one, and lowering the value of the other.

To face a period of great scarcity of gold or an oversupply of silver such as the world passed through recently, introduction of a bi-metallic standard on an international basis is, a French economist argues, a sheer necessity. If the value of one metal is affected, the other would take its place. But international agreement with regard to the same it is not easy to secure. If the value of silver falls, its substitution to the limited extent necessary to get the fixed ratio between the metals is difficult to achieve. Because of the danger of large imports of fallen metal from other countries national bimetallism is not workable. Again, on account of the unmistakable working of Gresham's Law the more valuable metal quits the field and leaves the valueless one in circulation. The law is inherent to and an impediment in the way of a smooth working of the bi-metallic system. Fluctuations in the value of gold cause suffering to gold standard countries, and fluctuations in silver affect silver standard countries alone. But under bimetallism both classes of nations suffer, whenever, the value of either metal is affected. But our position is different

and singularly peculiar. We have neither gold nor silver as the standard; ours is a gold exchange standard, which has the drawbacks and defects of both standards without the redeeming features of either. The financial malady is already too complex to admit of easy diagnosis. Bi-metallism introduces one more complication. The causes and effects of a rise or fall in prices whether due to currency, and to what extent, now difficult to analyse, may become impossible of ascertainment.

The Supply and Value of Precious Metals

Utility coupled with rarity confers value. Where supply is free and unlimited as in the case of air, usefulness by itself is not capable of conferring a value. In point of durability gold and silver stand at the head of the mineral kingdom. The actual destruction by consumption, and the loss from wear and tear are relatively small. Being put to a variety of uses, the demand for the metals is very great. The supply of these metals at any particular time is not the out-put of the year or the entire mass in existence, but the amount offered at the time for sale. For ages the process of accumulation has been going on, and the world's out-put is considerable. This is the potential supply exerting a steady influence on value. If the value of the metals rises, plate and jewellery are melted and sold. If the value falls, opposite results follow. Bullion is transformed into coin, plate, and jewellery. The supply is not solely from the productive mines. As the uses are varied, so the sources of supply, mines, bank reserves, circulating coins, hoards, plates, and jewels form the reserve, and the sources of supply. These counteract the tendency of the market price to change with every fresh demand or supply.

Silver

Silver had for long been used for monetary purposes, both as a medium of exchange and as a standard of value. But the universal adoption of gold as the standard has released large quantities of silver hitherto used for purposes of coinage. The coinage of the white metal has become

unpopular with the white races of Europe. It is being replaced by gold everywhere and except in the Far East its demand shrank low. The supply is from a variety of sources. World's production of new silver in recent years is estimated to be 250 million fine ounces, of which Mexico, Canada, and the United States supply three quarters. Weight for weight silver production is thirteen times the gold. Its productive conditions differ from those of gold. In addition to natural production from mines it is found as a 'by-product' in the working of copper, lead and tin mines. While 46 per cent. of the Mexican silver is from 'Straight Silver' ores, 80 per cent. of the out-put of the United States of America is a 'by-product'. Besides, the universal adoption of gold as a standard has set free large quantities of unwanted silver.

Two continents supply the metal—the European with its old melted silver, the American with its new supplies from the mines and a third the Asian continent undertakes to absorb it. For the years 1928-1930 India absorbed more than 100 million ounces of the metal. Silver ornaments, cups, saucers, spoons, plates and other utensils, fancy things, and luxury articles had a rapid sale. The annual out-put remaining at what it is, the future position of the metal depends upon demand in these countries. The depression becoming acute and trade balance being not what it was, India was not in a position to absorb fresh stocks. Her sons have to live on past savings. Bar silver which sold at 34 pence per ounce in July 1929 fell to 12·3 pence per ounce by February 1930. The reason for the rise of silver in terms of sterling is due more to the fall of sterling in terms of gold than to the rise of silver in terms of gold. With the increase of the stock the value of silver has fallen to half of what it was. Exports would have gone high, imports from abroad would have fallen and India would have all the advantages of a depreciated currency in a crisis such as the one we passed through but for the closing of mints for free coinage. The huge fall in the exports of China and India has affected the purchasing power of 800

millions of people, who form half of the human race, and the industrial countries that depend on them for trade are hard hit.

Gold

The immense growth in the value and volume of modern commercial transactions has increased the need for a common standard commodity, which has great value in small bulk. Both as the medium of exchange and as the standard of value, gold has replaced silver in every advanced state. Throughout the world people have a love, an attraction and a fascination for gold. For centuries it has been regarded as the king of metals. The discovery of new gold mines of great richness in California, South Africa, East Africa, Alaska, and in certain parts of the West of the United States increased the supply. China and India excepted, the rest of the civilized world may be said to have gold as its standard. The effect of it is two-fold. The extensive use of gold for currency purposes has enormously increased the demand and value of gold, and released amounts of unwanted silver with consequent fall in its demand and value. Payments are being preferred in gold alone in all international transactions. The enormity in the value of commercial transactions of the international world of commerce has reached a point when it is not easy even for gold, the costliest popular metal, to function.

What over-supply of a precious metal means, we are aware of. What under-supply means, let us consider a while. Though otherwise poor the world today is rich to illustrate both of these. For either we need indulge in no imagination. Gold is the medium of exchange and the standard of value. It is the metal that counts in matters of international trade. The demand for it is all out of proportion to its output. The most enlightened states that lead the van of modern civilization have taken to hoarding, and all countries except India have by statutory enactments laid severe restrictions on the embargo of gold from their shores.

Platinum

Silver and gold are the two metals that have been in use for monetary purposes. Silver has become cheap and ceased to function as the standard of value. As at present appears gold is too scarce to meet the demands of money to the extent required. Would not platinum serve the purpose? For a time it ousted gold from its high honoured position, and usurped its place as the king of metals. Gold has come to occupy a second place. Though Canada, Columbia and South Africa produce it, the largest part of the supply is from the mines in the Ural mountains in Russia. But during the Great War and the Russian Revolution, the supply being shut out, the price rose high, and the use of platinum is confined to merely ornamental purposes. A ring has come to cost six times the price of gold, and its position as the king of metals has for a time seemed assured. With the socialized methods of Russian production the value of platinum fell lower than that of gold, which once again resumed its former position.

But to be effective for purposes of coinage it has not captivated popular imagination. Its supply is scarce, uncertain and unsteady. Its use as a coin is not known. For the present the question need not worry us. It may well merit the serious consideration of the future economist if its supply continues to be large and steady, its value stable, and its use widespread and popular; and if gold ceases to be a standard either by too great a demand or too short a supply to meet the world's requirements, and if on either account its value becomes unstable and uncertain.

CHAPTER II

THE METHODS AND PRINCIPLES OF BANKING

AN eminent writer defines banking as "my brains and other peoples' money". In every country there are persons, who have the brains and the capacity for organization of an industry, but lack the funds necessary therefor. There are again others, who practise thrift and save money, but lack the initiative and the organizing skill to make the best use of it. Between these two classes of persons banks are a medium. As a rule banks have greater stability and larger influence than private persons, however rich and popular they may be. They in consequence infuse trust to a higher degree than an individual can.

With the dawn of the modern era a new chapter has opened in the history of banking. The discovery of the New World, the opening of a new sea route to the East and the establishment of nationalistic monarchies led to the growth of trade and commerce on a mighty scale. The scientific discoveries and inventions, the need for costly laboratories and plants of a later age have given a fresh impetus for the development of banking. But for banks none could have possessed or secured the money which capitalistic production and international trade require. With the growth in the variety and volume of business specialization as in production has come to be a new feature of banks. The result is that we have a large variety of banks in every country with different kinds of specialized business.

Credit and Currency

As seen in the preceding chapter the definition of the word 'Money' lacks scientific precision. Whether credit can be induced in it is a point not free from doubt. Though

definitions of the word differ in the emphasis they lay on one or the other aspect, they substantially agree that credit is an exchange transaction in which a person parts with goods on condition of receiving money in return at a future date. Bonds of public bodies, government currency notes, promissory notes, cheques, and the long list of bills such as sight bills, short bills, long bills, trader's bills, banker's bills, and loans of every kind do fall under the word credit.

Though all these serve the purpose as medium of exchange, all of them do not circulate in the same manner and to the same extent. Though a promissory note is as much a valuable security as a currency note, it does not command the same popularity and circulation as the other, notwithstanding the fact that both of them are instruments with an unconditional undertaking to pay the bearer on demand. In one case the value depends upon the solvency of the person executing it, and it does not change hands without a transfer duly made; and the transferee would not accept it unless he is satisfied with the credit of the transferer and the executant of the note, while it is different with a currency note. The Government in our country issues notes as banks do in the West. There is no gainsaying the fact that the Government or the banks wield greater influence and enjoy higher credit over a wider area than any individual, and the notes they issue have in consequence a wider circulation without the need of a transfer. A bill of exchange is an unconditional order addressed by one person called the drawer to another called the drawee requiring him to pay a third person called the payee a specified sum of money. As a promissory note it is transferable by one person to another. A cheque is an instrument with a limited circulation depending on the credit of the person drawing it and the bank on which it is drawn. It has an advantage over the bank note in that it can be drawn to any extent including fractional amounts whereas a note is for a definite round sum. A cheque mentions the name of the person in whose favour it is drawn, and involves no risk of loss or practice of fraud. It can be drawn

at any time thereby dispensing with the trouble which carrying involves in the case of a currency note.

Paper money, whatever name we call it by, is as efficient as metallic money in exchange transactions. A large proportion of the capital employed in industrial and commercial enterprises is being secured by credit instruments. The introduction of capitalistic methods of production and the extension of the area over which commerce is being carried on have given credit instruments the foremost rank, and in point of safety and convenience even superior to gold, the precious standard of advanced states.

Advantages of Credit

As the medium of exchange it is as good as metallic money. Its extreme inexpensiveness is a strong point in its favour. It at the most is worth the paper it is imprinted upon. The weight and bulkiness of copper, bronze and nickel in comparison with silver and gold have conferred greater utility on the latter. In point of safety and easy portability even the precious metals fall far short of paper. With greater security and at a lesser expense paper currency can be sent to long distances without subjecting the parties to any loss in case of any accident. Because of the hugeness of modern business economy of time is a vital need of the day. Counting and testing of coins involves much waste of time.

Metallic money once lost is lost for ever. It is hard to trace, and harder still to identify. The person, whose possession it has fallen into, can make use of it with no fear of detection and punishment. But in the case of a bill, a cheque or a note with the name of the person noted thereon it is not easy.

Most important of all the inherent powers a credit instrument has over metallic money to adjust itself to the daily needs of society. Automatic adjustment to the business needs of a people is what is required of a good currency, and paper currency does it in a superb way expanding and contracting

with business requirements. Bills, notes, cheques and deposits swell in the busy seasons of the year and dwindle at idle times. Metallic currency creates an artificial state of things. Minting fresh coins for seasonal demands would no doubt achieve the object. But what to do with it at idle seasons? To have the unwanted coin in circulation is to inflate currency and artificially raise the level of prices. To keep it in the vaults of banks is to forego interest. To convert it into bullion for minting again when demand recurs is expensive. Paper currency involves little trouble and less expense. A mere book entry is what is required for an increase of it. It is more elastic, more economical, and suits better with the demand for money at all seasons. But for credit instruments human and natural resources of a country could not have been developed at the present speed, and modern capital could not have become so efficient as it has. If internal and external transactions are to take place in gold and silver alone, the amounts available would be quite insufficient to meet the demand.

But the popularity and circulation of credit depend on the enlightenment, the habits, the nature and extent of business of a people. The circulation of notes in India is limited and unpopular not on account of the ignorance and the habit of hoarding of the masses as the critic puts it, but because of the difficulty of preserving and circulating the same without being spoiled. Paper currency in the hands of the farmer living in thatched houses is in constant danger of being destroyed by wind, rain and fire. With no good boxes or safes to preserve, it is liable to be soiled or spoiled by the ravages of rats, white ants or other destructive agents.

The Supply of Paper Currency

Paper has practically no supply price. At a singularly short notice any amount can be supplied the cost not exceeding that of paper it is imprinted upon. The supply cannot go on indefinitely increasing. It is regulated so as to serve the interests of agriculture, industry and commerce, and

restricted by rules and laws with a view to achieve wholesome results and avoid disaster.

The issue of a Government note is in reality a loan taken from the people. Though no money actually passes in borrowing, the issue of a note creates a loan. While a loan ordinarily connotes a promise to redeem the sum borrowed with certain interest at some future date, a note is a non-interest-bearing instrument redeemable on demand at any office of issue. Notes are liable to depreciate. The ability and willingness of Government to promptly meet the demand leaves little scope for fear, speculation or depreciation, which notes are normally subject to. A deposit likewise creates a loan by the bank wherewith it is deposited with a certain rate of interest and payable to the depositor in part or as a whole at any time a cheque is issued.

Its Relation with the Standard Coin

In every advanced state paper currency forms much the larger part of the circulating money. So great is the part played by it that some economists regard it as adding to a nation's capital, and as a factor independent of the standard coin, forgetting that it owes its power and force and ultimate existence to a metallic basis. To meet the internal and external financial needs banks create credit. The value, strength and stability, and the ultimate convertibility of paper currency depend upon the standard. The value of standard coin in its turn lies on other factors. The laws of supply and demand operate in the case of currency much the same way as they do in others. The great utility of the standard coin consists in its being the standard of value and the medium of exchange. As a standard of value it performs its chief function by lying in the vaults of banks and government treasuries. For every issue of paper currency there is to be a corresponding deposit of the standard coin. The deposit varies from bank to bank and country to country depending as it does on the confidence the people may have in the bank or the government as the case may be.

The demand for the standard coin can greatly be relieved by a proper substitution of credit currency as the medium of exchange, and by a change in the laws pertaining to bank reserves. All wears well in normal times. But during periods of distrust and uncertainty use of the standard metal both as reserve and for purposes of exchange is insistent, and inability to meet it is a great disturbing element.

The Rate of Discount

For supplying money banks take a certain discount in advance or at the time of the transaction. Whenever a currency note or a bill of exchange is presented for cash payment a certain interest is deducted on the sum paid. The rate of discount depends on the money loanable and on the demand for it, and varies from time to time. In India the rate is 3 to 4 per cent. during dull seasons, while at the time of harvest it rises to 6 to 8 per cent. the demand for money being great. This apart, the rate depends on the temper of general public as well. When times get nervous, and people lose confidence in one another, banks raise the discount rate so as to deter people from demanding immediate cash payment. With the rise in the rate of discount gold and silver flow for investment from places where the rate is low, and thereby add to the metallic reserve. Banks do by this device try to maintain sufficient metallic reserve to tide over a crisis.

The foremost function of banks is to increase credit and that in two ways: by the issue of notes, and by the creation of deposits. There is no difference between a bank note and a deposit so far as the obligation of banks to cash the same is concerned. Commercial banks have further to balance credits and debits that arise in the ordinary course of business. They lend and borrow. The creditor and the borrower are combined in them. As payments go out, payments come in. Sometimes, the one, sometimes the other predominates. How much of money they need for the business they carry on, and how much they have to reserve to meet a contingency are matters which experience teaches them,

How Deposits Affect Trade

Paper currency circulates much the same way as metallic money does dispensing to an extent with the latter, and enables a bank to do a lot of business with a small amount of reserve. A deposit creates a loan by the bank to be paid over to the depositor or the person in whose favour the cheque is drawn. So an increase in deposits means a corresponding increase in the cheques drawn and money paid. An increase in deposits means an increase in the total currency in circulation. With the increase in supply the value of money falls, and prices rise. People demand more wages for their services. For ordinary internal transactions of sale and purchase, which are generally of a low denomination, paper does not suit as metallic money does. An increase in deposits involves and is conditional on a corresponding increase of cash reserve. A bank cannot indefinitely increase deposits without imperilling its position.

Bank Reserves

It is a settled fact that banks should always keep a certain amount in reserve to cash cheques and notes, and to meet internal and external drain. To keep idle reserves is not good business. Nor is it profitable as interest at a certain rate is to be paid on the deposits. So it is well to keep money in as fluid a state as possible. It is to be lent for short periods so that money comes in as money goes out, and there would be neither shortage nor difficulty to meet unforeseen contingencies such as a run during a period of war or crisis when suspicion is rife and people get panicky. The recent failure of banks in Germany notwithstanding the excellence of the system is in part due to their participation in domestic and foreign industries of a speculative nature. The reserves being locked up for long periods, it was not possible to mobilize them to tide over the crisis. Money lent for the plantation of coconut, mango and casurina groves or loans granted to farmers for improvement of lands fall under the same class.

There is no hard and fast rule as to how much of metallic reserve there should be for a certain increase in the credit instruments. It varies from time to time, country to country, and bank to bank depending as it does on direct necessity, force of custom, internal and external drain, State regulation and the confidence which a bank instils into its customers. During the Great War paper currency increased fourfold in England without a proportionate metallic reserve. Of two banks with equal metallic reserve the one commanding greater influence and confidence can do a lot more of business than the other. But it is never to be forgotten that a healthy increase of credit always goes with a proportionate increase of metallic reserve.

The amount of metallic reserve that a bank is to keep cannot be predicated with any degree of mathematical accuracy. The Bank Charter Act of 1844 empowered the Bank of England to issue notes to an extent with no corresponding metallic reserve, and every increase over the limit is to be accompanied by 50 per cent. metallic reserve. All local banks have dealings with it, and in times of financial distress every one of them looks to it for help, and it is aptly called 'the banker's bank' or 'the mother of banks'. When its reserves are precious little or locked up in long term loans what help can it extend? This apart, England has trade connections with every part of the world, and the Bank of England performs the function of an intermediary. Any merchant can meet his financial obligations in the Bank of England's notes which have a legal tender value with no limits that geography or nationality assigns. Hence the need for large reserves.

The Banking Act of the United States of America has laid down that banks in towns should keep a reserve of 15 per cent. of their deposits of which $\frac{2}{3}$ should be in cash in their vaults, and the remainder with approved national banks. The city and presidency banks in their turn are to keep 25 per cent. reserve in the central bank.

The Minimum Denomination of a Note

A note is as good as a standard coin both as a medium of exchange and as a standard of value except that its extreme cheapness and convenience commends it in all big transactions. But it has no independent existence. It circulates and its value remains at par because of the guarantee that it is worth what it purports to be, and if need be, fetches standard coin of the value set on its face. The Bank of England has laid a rule that there should not be notes of a lesser denomination than £ 5/-. The absence of such a lower limit is attended with a double danger. Paper currency would be found to be a cheaper substitute for metallic money. With no intrinsic value it would speedily multiply in quantity, and by the operation of Gresham's Law drive metallic coins out of circulation. This would lead to an inflation of currency and a rise of prices. Secondly, being for pretty small sums it ceases to be convenient and easily portable. It dispenses with the necessity for keeping a metallic reserve and takes the role of metallic money in every-day transactions. If not put an end to in time, it will lead to depreciation and crisis. Recourse is being had to paper currency on occasions when more specie is required for purposes of war. The two-and-a-half-rupee notes, and one-rupee notes were introduced in India for the first time during the Great War as a temporary measure, and were withdrawn as soon as the Government felt itself in a position to purchase enough of silver and issue rupees. As to the dangers and difficulties of notes of lesser denomination in a country like India we have said something. Who is the proper issuing authority—the state or private banks?

When issued by a private individual or a local body it is subject to a small and limited circulation. Coinage and minting are now matters of general interest, and classed under the duties that a modern state is called upon to discharge. State regulation secures greater uniformity. When the Government is the issuing authority, there would be greater

security as it would keep larger reserves. The benefit that accrues from the issue goes to the public, while in the other case the individual or the private bank pockets the gain.

But the drawbacks outweigh the benefits. Government officials lack the expert knowledge and training that banking business involves. Their knowledge is poor, outlook narrow, and vision distorted. They are not diligent either because no self-interest is involved. In the eyes of the law a bank is a legal entity, a juristic person with all the rights and liabilities of a commoner, and amenable to the laws that a state may in the general interests of a people enact. But when the state is the issuing authority and a wrong-doer at any time, there is no remedy open. No court can take cognizance of the offence, and no earthly tribunal can try it as the judiciary is a part of the state, and subordinate thereto. And what is the law it can be tried under, the very laws it makes and can unmake? When the state is the issuing authority, there is the danger of over-issue and ultimate inconvertibility. The laws passed or restrictions imposed can at any time be repealed or removed with impunity without fear of punishment or penalty. During the Great War note issue went apace in every country with no corresponding reserve. Once taken to over-issue, depreciation and inconvertibility follow in quick succession. The question is as to which is better—uniform note issue with the danger of ultimate inconvertibility or diverse note issue with no such fear at all?

The banking school argues that the fear of over-issue is more fancied than real with no basis in reason or logic. Over-issue means putting more currency in circulation than is required. Notes and cheques are issued only when a people feel the real need for the same. The moment the necessity ceases to exist, they would be presented to a bank for a cash payment. Self-interest being at the bottom of economic action, banks act with great care and caution. State interference is uncalled for, and attended with grave consequences.

The policy of *laissez faire* is not always the safe course. It proceeds on the assumption that every one knows and acts in his interests. As a matter of fact few really know their interests, and the number of those that look to them is smaller still. It therefore behoves the state, which has as its objective the welfare of the people, to give proper direction in the matter. It is now admitted on all hands that no one ought to be permitted to engage in banking business without special authority from the state. Public safety is in one word the reason. For making payments to depositors, note holders and creditors a minimum metallic reserve and surplus is imposed on all banks. The surplus is for meeting loss that may at any time occur without infringing upon the resources of the bank. Bank deposits are, however, allowed to expand to meet commercial needs consistent with safety. The points put forward by the banking school do not bear the test of too close a scrutiny either. It is not always true that notes are always issued as and when there is real need. To increase business banks do by a slight lowering of the discount rate create an artificial demand for notes. With the false stimulus paper currency goes on increasing, and the proportion it bears to the reserve becomes less and less till a point is reached when it is no longer easy to cash the notes. Is it not better to restrict note issue than face ultimate inconvertibility? Again, an increase of currency whether it be paper or specie brings in a rise of prices. Advocates of the banking school take no notice of cheques. In its effects on currency and prices a cheque acts the same way as a note does. With regard to the liability cast on a bank a cheque and a note are at one and on a par. To restrict note issue at one end while allowing deposits free and unchecked at the other is doing things by halves. But England and France follow it as the restriction of the one and the freedom of the other fit in with their commercial requirements while in Germany note issue beyond a certain limit can be secured by a cent percent metallic reserve or a fine of 5 percent, to

the state for every increase, and in America the national bank that wants to issue notes must purchase government paper of the value and keep it in the treasury as security. The reason is that whereas a note issued by a state or a bank freely circulates from hand to hand like metallic money, the solvency and credit of the drawer and the bank drawn against are tested before a cheque comes into operation. None will deposit in a bank unless he is confident of its solvency; none can draw a cheque against a bank unless he has a deposit with it; and none will accept a cheque unless he is satisfied beforehand with the credit and solvency of both.

To secure uniformity without the risks that attend on governmental control is the best solution. With this object banks are put under the examination and supervision of public officers. The appointment secures greater uniformity while minimising the risks of private issues.

As examination of the several systems shows that there should be a metallic reserve for every fresh issue of notes, what ratio the note issue bears to the reserve cannot be predicated with any degree of mathematical precision. The extent of the use of credit instruments is a matter of habit depending in part on the use of hand-to-hand money, and in part on the enterprise of banks. With the increase of banking institutions and their easier accessibility to all the use of credit instruments is ever on the increase. Under well-regulated banking laws note issue by national banks secures greater security with lesser fear of abuse. But where 'the control of currency and of credit is in the hands of two distinct authorities, whose policies may be widely divergent' as when credit is in the hands of banks and currency in those of the state with no coordination of the one to the other the system cannot but be inherently weak



CHAPTER III

BANKING IN INDIA

WITH her agriculture and industry in an infant state, with her resources still untapped, India needs by far the larger amount of capital than any other country. Her agriculture and industries do in large part languish for want of capital. The demand for money is too great and supply mighty little. The interest rates are high and exorbitant penal and unconscionable. In putting the industrialist, the merchant and the farmer in possession of sufficient capital at reasonable rates and on easy instalments as and when they require banks fulfil an important function. To be of real use their number must increase and their varied activities must extend far into the interior parts of the country, into hamlets and out-of-the-way villages. The farmer needs no longer sell his raw produce at unremunerative rates to meet his pressing demands the moment it is harvested, and he would have greater capacity to withhold the stock for a favourable market. There would then be no victimization. The high rate of interest, the yearly or half-yearly, rests compoundable on default, and penal clauses now put too great a premium on the honesty of the borrower, who wishes to pay, and to the unscrupulous person the law allows too great a latitude to shield his property by nominal and fraudulent transactions and come forward to protect his person by an I.P. With the decay of trade and industry, agriculture has come to occupy a quasi-monopolistic position.

The Inadequacy of Banks

‘The one outstanding fact is that India is chronically under-banked.’ In England and Wales there is one bank for every 4,500 souls, in the dominions one for every 2,300 to 2,700, while in India there is hardly one for 9,00,000. According to the Bankers Almanac and Year Book for 1927-28 the United States of America has got 25,000 Bank Officers, Great

Britain and Ireland 13,100, France 1,200 while India has 500 only. Out of 2,300 towns in the land 339 have a bank, a branch or an agency by 1928. It is because of the absence of sufficient savings and investments by way of deposits. People want money and value banks as borrowing institutions. ¶

The right of note issue and the use of Government balances are special privileges conferred on certain banks. The Presidency Banks in India enjoyed the right of note issue upto 1861 and on occasions had Government balances. The Imperial Bank of India enjoys the monopoly as the Presidency Banks are incorporated in it. It has in consequence become the most powerful institution with a large number of branches throughout the country.

Rural Indebtedness

The indebtedness of the Indian Farmer is severally estimated ranging from 600 to 1,000 crores of rupees. The Banking Enquiry Committee puts it at 900 crores. About 40 per cent. of this colossal sum represents the annual borrowing for seasonal operations, and the farmer is to repay it out of the year's harvest. The remainder represents his past indebtedness. In Bihar the percentage of the annual to the total indebtedness is 34 per cent, in Chhota Nagpur 39 per cent, in Orissa 24, and 32 in the province as a whole.* The Central Areas Banking Enquiry Committee estimates seasonal loans at 41 per cent, and intermediate loans at 31·9 per cent. of the total agricultural borrowing.**

The Bengal Committee places the short and intermediate loans of agriculturists of the province at 96 crores. Bombay fixes the current agricultural expenses at $32\frac{1}{2}$ crores as against 81 crores of total indebtedness, while the Madras figure is 70 crores as against 150. In the

¶Vide the article in the International Supplement of the Financial Times, 1930, by Mr Baxter.

*Vide para 98 on page 48 of the Statistics of Bihar Committee.

**Ibid para 68.

United Provinces 40 per cent of the cost of cultivation is taken on short term or seasonal advances. The Central Banking Committee puts 300 to 400 crores "as a lower limit of cultivators' requirements of the short and intermediate working capital." Special Rural Insolvency is a remedy suggested. As the malady is great, so must the remedy be. The measure has far-reaching and disastrous consequences. It makes the farmer, in whose interests it is advocated, less self-reliant, more extravagant and more unscrupulous. It undermines morality and saps the fount of agricultural credit, and no capital would be forthcoming for future agricultural purposes. Those that pin their faith on legislation as the panacea for all economic ills are mistaken. Acts of legislature are negative in scope. They at best prevent matters going wry, from bad to worse. But they cannot by a stroke of the pen as if by magic metamorphose society or make a people rich and prosperous. If so, it would be a glorious day indeed. All we need do is to sit and pass volleys of acts in quick succession.

For clearing rural indebtedness, for putting the farmer in possession of sufficient capital for seasonal operations, and for industrial and commercial progress the establishment of banks all over the country is a sheer necessity—banks of various types, of varied functions and activities—Cooperative Societies, Savings Banks, Insurance Companies, Land Mortgage and Commercial Banks with branches in important places and with a central Reserve Bank of issue at the head for long and short term industrial finance with extended facilities for rural credit. By offering fresh avenues of industrial development banks would largely relieve poverty, recreate life, infuse strength and vigour, and bring in a happy moderation, equipoise, and balance amongst the several crafts, arts and callings while considerably lessening the pressure and strain on land.

Co-operative Movement

It is not foreign to us. In the cooperation of ryots to drum out monkeys or birds that destroy crops, in the use of

common pastures and common threshing floors it is familiar to one and all. The Hindu joint family is an important phase of it, and all that is needed is to extend the pervading spirit eliminating the evils it is subject to.

The movement is to be all comprehensive holding within its embrace both 'business needs' and 'social needs'. It is to step into the shoes of the money-lender to supply the needs of the farmer at reasonable rates both by short and intermediate term loans. The total circulating capital is small, and does not cope with the business needs of the people. For seasonal agricultural operations much the larger amount than is now available is required, and every important village or group of villages is to possess a society of its own. Up to now the movement has but touched the fringe of the problem. A large percentage of agricultural population is still outside its pale, unprotected and helpless. The credit which the few existing societies supply is neither adequate nor cheap. The interest rate is by no means low and not within the easy reach of the average farmer.

Advances made mostly cater to the extravagant and wasteful ways of living. Money should not be advanced for unproductive purposes such as marriages, feasts and festivals. Nor should it be allowed to find its way into toddy shops or gambling dens. It is to be strictly confined for productive purposes of agriculture and industry.

It is a sure remedy for most of the economic ills that afflict India today. As the Provincial Cooperative Institute of Bombay has finely put it, there can be "no salvation without cooperation". But the vast accumulation of arrears inflicts injury on members, and brings on discredit to the movement itself. The liquid state of finance is to be improved, and the delay to call in liabilities is to cease.

The success of the movement depends upon the existence of virtues, intellectual and moral. Energy, economy, system, and self-reliance are some of the prime qualities, which this movement can ill-afford to neglect, and dispense with as of no consequence. Besides, without credit and character

business cannot continue, banking prosper, and cooperation make much headway. It is well 'to know that modern commerce is largely founded on 'Credit' which assumes and stands firm on moral qualities such as integrity, impartiality, sympathy, trust and mutual goodwill. A person in the West clings to his credit as his chief asset, and the fear of his credit being shaken or suspected makes him keep his financial engagements promptly and in time. If he forces people to resort to legal process for recovery of dues, few would lend him money or sell goods on credit.

But with us credit in the abstract has not the same value as tangible property. Status in society is based on birth, and determined by caste. Insolvency does not affect it. People here know it for a fact that by honest surrender of property to creditors, himself and his heirs are losers to that extent. They sometimes make most of the law of *benami* intended to protect people who put their properties in other people's names. The wholesale application of the law of insolvency to a country like India with different social and economic conditions, and predominantly agricultural with personal laws based on custom, religion and morality is most unhappy and unwholesome.

It is not the number of societies that counts, but the moral condition* of cooperators and the success of the existing institutions. The several societies working throughout the land are to be brought under one central organization so as to gain in strength, power and popularity. As an educative agency the value of cooperation can hardly be over-rated. It is to teach that cooperation is essentially a people's movement, and to encourage them to extend the sphere of activities to every branch of economic and social life, and make man more resourceful, self-reliant and selfless. Sound, silent workers fired with patriotic fervour are the crying need of the hour so as to completely eliminate the 'Co-operation of scoundrels' as Ruskin rightly dreaded.

*In Scotland cooperation had a religious origin being connected with the religious revival in that country.

Savings Banks

Though our people have a mind to save, they lack the means, and the little they save is hid in the bosom of the Mother Earth or converted into jewels to decorate women as dolls and toys. If woman is given proper education, and if free facilities for safe investment are offered, capital, which is now in a frozen state, will flow into banks with an advantage to the creditor and the borrower, the person with capital but at a loss to do what, the needy farmer, and the industrialist who can put it to the best use with great benefit to themselves, the community, and the country at large. The habit of saving and that in banks is the sure way of developing agriculture and industry, of solving the problem of unemployment, of making the country rich and prosperous, and of ridding it of the ever-swelling national debt that eats into the vitals of a growing nation. The example of Great Britain, the intense patriotism, and indomitable spirit of self-sacrifice of her people during the stormy years of 1931-33 is well worthy of emulation. With them saving is a second habit. From £ 16 per head in 1911 it had doubled to £ 33 by 1921, and in spite of the intense economic blizzard, it has risen to the amazing figure of £ 50 by 1931.

A large amount of capital is now invested in the purchase and mortgage of lands with the consequence that the land value has gone out of all proportion to its yield. It is not unfrequently turned into dead capital by conversion into gold and silver ornaments and utensils. Money utilized for these purposes is money lost for productive purposes. No wonder that the farmer and the industrialist do always feel the pinch for capital. People are to be taught to abstain from investments that yield little return or none at all. Assets frozen or otherwise employed are to be mobilized so as to create new forms of credit. The value of the land is to be brought in harmony with its income and thereby realize the savings of people for better investment in banks. The tendency of diverting the funds of local areas and inland centres of trade to presidency

towns for the benefit of towns and trading centres is to be checked. The local credit agencies, the rural cooperative societies and others are to be linked into a central banking organization so as to facilitate lending crop loans and easy recovery of those granted.

Much gold and silver are being locked up in the shape of ornaments and jewels. From an economic view it is a loss and a waste not to the individual wearer merely, but to the country at large. By issuing a special form of Ladies Cash Certificates called Stridhana certificates with a certain rate of interest, and extending to them the same kind of legal protection which they now have over their Stridhana property large quantities of the precious metals can be attracted to bank and made available to the needy public. That jewels are worn for the mere love of wearing is a wrong view, and a failure to take stock of hard realities. During the recent economic depression people in dire distress sold hundreds of thousands worth of gold. A little education and a right move in the proper direction will release huge quantities of precious metals for developing the decaying agriculture and struggling industries. The inert and immobile capital now shy and in a condensed form is to be made to melt and move boldly into banks. The Deposit Companies, the Post Office Savings Banks, and such others are to be made available and attractive to all even in the remotest corners of the country.

Insurance

The origin of the system of Life Assurance may be traced to the Roman Collegia, to the religious festivals and ceremonies, and the yearning of the members of a college to give fitting burial to a dead member. Even now Funeral Expense policies are in vogue in England.*

But as time flew the devotional aspect sank into the background, and temporal considerations gained ascendancy. Persons in distress have come to possess a claim on the kind-

*Vide *Program of Insurance* by Mr. Suresh Chandra Ray M.A., B.L., F.R. Econ.S., *Liberty* Books Number 1929, Page 48

ness and generosity of their kinsmen or fellow-beings who are more fortunately placed in life.

Mutuality is the underlying principle of all assurance. The affluent members with no great sacrifice to themselves extend monetary aid to an unfortunate member or his dearest ones on the assurance that others do likewise if any mishap occurs to them. It was at work in the guild system of mediæval Germanic towns, and is at the basis of Hindu Joint Family. If the weak and the helpless are to be protected and provided for, community ties are to step in as family ties grow weaker. It is nothing but an expression of the spirit of cooperation, an extension of the principle of Hindu Joint Family, and a true recognition of the principle of 'each for all, and all for each'.

It is being extended from persons to objects so that few valuable things remain un-insured. Besides insurance of life there are today a host of others such as Marine Insurance, Industrial Assurance, the Unemployment Insurance, Fire Offices, Accident Offices, and Collecting Friendly Societies. The Guild of Insurance officials made available to insurance workers articles of daily necessity at reduced prices and secured for them better treatment at the hands of employers. The workers have further formed into what is called the Insurance Parliamentary Association to foster useful legislation and oppose bills that are detrimental to their interests.

In India however insurance has not received the consideration it deserves. Compared with those of other countries figures for India are poor and discouraging. While in 1928 the sum insured in America is 26,209 crores, Canada 1,573, Germany 907, the United Kingdom of Great Britain and Ireland 3,157, Japan 1,051, the total sum insured by India is only 124 crores. Of this sum 71 crores are secured by Indian Companies while 53 crores go to the Non-Indian companies, and of the 6½ crores of annual premiums 3½ crores go to the Indian concerns while the rest to the non-Indian.

In making provision for old age, for the dependent members of the insured, and in promoting thrift and compulsory

saving, life insurance has done a good deal. It makes large amounts of capital available for investment on long term loans. The money can most profitably be invested on farm mortgages. Life insurance and Land Mortgage Banks go hand in hand. They are inter-dependent and inter-related. The peculiar kind of investment for long terms which each requires suits no other so well.

For reasons, sentimental and superstitious life insurance is not popular with many of us. There is something inauspicious, something terrible about the very idea of it. But death is as certain an event as birth itself. What with the present mechanistic civilization, what with the insanitary and unhealthy over-crowding of town life, what with the feverish activity, the immoderate and artificial modes of living, what with the accidents by bus, car, and 'plane, the chances of death are growing greater than the chances to live. To make no provision against accident to person, property or death is a sheer folly. Far from bringing one nearer to death's door the dissemination of a knowledge of health principles with the spread of life assurance aids to promote the longevity of life.

Cattle Insurance

Not only human life but all that man values in the world, his possessions and belongings that are subject to death, decay or risk are being insured today. In the matter of cattle insurance a vast unexplored region remains for future development. In India cattle have for long ages been looked upon as a valuable form of wealth. If the people are to prosper, it is well to provide against the possible loss of this particular kind of wealth. They are now at the mercy of epidemics and diseases, which take a heavy toll year after year.

The Insurance Societies in Burma that began with a flash ended in smoke. The Mysore Cattle Insurance Company fared no better due in part to the inability to bear the heavy epidemic losses. As in the case of life insurance it is of high

educative value leading to a study of the principles of animal life, health and nutrition. Without improving these things it is vain to hope for success of insurance. Calculations made and averages struck would not carry us far as there might be too many unforeseen sudden deaths at any time.

The foremost thing to do is to improve the stamina and disease resisting power of cattle by timely veterinary aid, nourishing fodders and improved methods of rearing. Insurance Societies with a central re-insurance Society to share risks and losses can successfully tackle the problem.

Insurance in Indian Companies is a matter of duty not to the person or family, but to the community and country of the insurer. He thereby keeps moneys in India that now drain to foreign lands. Whereas insurance in foreign companies at the most benefits the policy-holder or his nominees, insurance with Indian Companies immensely aids to develop Indian agriculture, Indian industries, Indian enterprises besides strengthening indigenous companies, reducing the dead weight of the national debt, and improving general economic conditions. It has stood its trial remarkably well in largely relieving people in times of crisis, epidemics, wars, floods, famines, depressions and devastations. Boundless is its capacity for rural, industrial and national development, and with its progress we are assured of a great future. Capital increases and credit becomes cheap and popular.

As the Insurance Law is, there is now no scope to safeguard Indian Insurance Companies from the unfair competition, and dumping of Foreign Insurance Companies. While foreign companies enjoy complete immunity in our country, Indian companies labour under severe disabilities abroad. To protect indigenous companies from outside competition, Spain insists on heavy initial deposits, while America requires the premia collected to be invested in American securities to meet internal engagements.

Now that many companies have sprung into existence we are in need of a large number of trained men. Persons

interested in the progress of Indian insurance must see that suitable centres are organized to educate and train insurance workers.

Besides supplying the necessary life-blood to indigenous industrial concerns that now struggle for existence, the fruition of the scheme will in part solve the problem of educated unemployment. Though Insurance business is still in its infancy there are already 5,000 salaried persons in different insurance companies in addition to 50,000 field workers that eke out a decent living, not to speak of the many medical examiners, auditors, and others that find in it a good source of income. Insurance advertisement is a main source of income of many of our journals and newspapers.

The Land Mortgage Banks

The construction of irrigation tanks, canals and tube-wells, the reclamation of waste, the conversion of dry into wet, and the methods of marketing require no small amount of capital, and no other institution supplies the want so effectively as the Land Mortgage Banks. These banks form an important branch of the cooperative movement. Still in the infancy of development, and with the lack of capital they are struggling for their very existence. In Germany, the home of the Land Mortgage Banks, Life Insurance played a great part in financing the same. The banking institutions of the land play an important role in the spread of popular insurance. The American Insurance Companies invest 20 per cent. of their accumulated funds in Farm Mortgages, and are ever on the look-out for better methods of serving rural credit. To handle farm loans at every stage it had developed Farm Loan System, and the moneys invested up to 1922 amount to 312 crores of rupees, to put it in our coin.

If the demand for capital is to be met, if the high interest rate is to be reduced, and if the farmer is to be put in possession of funds for his economic needs, Life Insurance Companies and Land Mortgage Banks are to be established and function side by side with mutual advantage

to each; for the one cannot thrive without the other. Much the larger part of the funds of the Insurance Companies must be in long term securities while a small part of the assets is to be in liquid securities to answer calls that mature in the year. Farm Mortgages hold special facilities for this kind of investment.

As the Townsend Committee has observed Life Insurance in India has suffered in the past on account of the absence of suitable long term investments for their funds. The facilities offered for long term credit at reasonable rates and on easy terms will steadily diminish rural indebtedness without having recourse to sweeping legislative enactments of doubtful efficacy. For supplying the financial needs of agricultural committees the Royal Commission on Agriculture, and the Central Banking Enquiry Committee recommended the establishment of Land Mortgage Banks. The Cooperative Central Land Mortgage Bank established in Madras is a double boon both for life insurance and rural credit.

Foreign Exchange Banks in India

Capital is what we want, and what does the source matter so long as we are able to get it? Western countries are over-banked. Capital so far saved is large; few resources remain unworked, and investments bring in low returns. As the foreigner knows that investment in India is more profitable, he is ever ready with his purse to supply the deficiency.

The East India Company has given a great impetus to foreign banking in our country. The number of Foreign Exchange Banks, which was ten before the Great War, has now come to 18 or 19, the Lloyd's Bank being the latest in the field with a most palatial building for its quarters in Chandni Chowk, Delhi so as to impress its greatness upon the Indian clientele. Though much the larger part of work is being done in India most of the banks own an office at London.

With the profits made, and deposits secured here they are independent of home resources. As the Indian Chamber

of Commerce of Calcutta has recently estimated, in the huge annual export trade of the country India's share is 15 per cent. of the total, and of the 200 crores of total bank deposits foreign banks share as much as 72 crores. These banks do a soaring business and reap high profits.

Our foreign trade is wholly handled by them. No accounts are opened in dollar, sterling or any foreign money. Commission is charged on all drafts in every exchange transaction of sale and purchase of foreign bills, and on the difference in buying and settling rates on the day of remittance. To finance business they draw Indian money at 3 to 4 per cent. interest, and get high tax-free dividends rising in certain cases to 20 per cent. per annum.

They are subject to no audit or control, and publish no accounts of their financial position. They cater to Indian deposits at a rate lower than in local banks and the Government securities, and the moneys so secured in India are sometimes spent abroad in Hong Kong, Ceylon, Siam, Singapore, Java, Borneo, and other places where higher returns are obtainable. On account of their imposing appearance and high-sounding 'home connections' these are regarded as safe and sound concerns.

There is not a single Indian Exchange Bank. These banks monopolize and enjoy the pick of profits. By exploiting business opportunities they annually drain crores to foreign lands. In spite of cries and complaints from centres of trade and business, they care little, and do less for the promotion of Indian banking having divergent and opposite interests. Racial discrimination, neglect of interests, and positive hostility to rival Indian institutions is a frequent occurrence. It is not easy to bring them under the control and purview of law.

They bring to the fore racial issues and familiar slogans such as 'no discrimination', 'equal rights,' and so forth. They plead for equal opportunities and no monopolistic advantages. How can there be equality between unequals, competition between a giant and a pigmy? Equal opportunities would

mean nothing but the right to exploit, and dominate, and destroy. 'The open door policy' which England adopts or once adopted is not the true standard for all. A powerful person can keep his door open. A weak person must close it if he wants to make himself secure. Equal opportunities there can be none between two persons or states with divergent interests, and unequally developed. There can be no healthy competition between foreign banks with large capital, great efficiency, vast experience, and with unbounded business facilities in colonies, dominions and protectorates that are politically and economically backward, and our own banks with none of these advantages and still in their infancy just feeling their way.

The Currency Committee in England suggested the necessity of protecting British banks from foreign finance. Inter-statal restrictions on the establishment of banks in America gave a rude shock to the growth of branch bank system and led to the establishment of many independent banks. No bank can start business in France without ministerial sanction, and a discriminatory tax is levied on the investment of foreign capital. In Japan state licence is to be got for starting banking business.*

The objection is not so much against the use of foreign capital as against the abuses it leads to. So long it works for the betterment of our banks and trades there is not much to complain against. But when lending is resorted to squeeze the resources and discriminate against the sons of the soil, the evil creeps in. To break the existing monopoly of the exchange banks and provide 'equal and fair opportunities for all' the Central Banking Enquiry Committee took on itself the task of evolving principles and regulations. So long foreign banks remain unchecked in the enjoyment of their extensive rights and privileges, there is little chance for the emergence of an Indian Exchange Bank or for the growth of healthy banking business in the land.

*Foreign Banks in India by Mr. D L Bubeys M.A., Ph.D
Modern Review, May 1931, page 521.

Bank Failures : Causes and Cures

The bitter memories of recent bank failures—the Arbatnot, the Alliance Bank of Simla, and the Japanese Bank, the Straus and the Standard—are still fresh in men's minds. These have made people nervous, and have shaken their faith in banking institutions. In the face of facts words have but little force. Logic, argumentation and appeal to reason or sentiment cannot convince them. Our banking system is modelled after the British pattern, in which free trade principles dominate. The policy of *laissez faire* plays as much havoc with our banks as it has with our industries. As in the advanced states we have no separate banking laws. Our banks are established under the Indian Companies Act.

In times of crisis our banks must depend on their own resources, and cannot look to the parent bank, the central or the federal as in England or America. During times of financial crisis the Bank of England throws its doors open to render the necessary financial assistance, and by a temporary suspension of the Bank Act, the Central Bank is allowed unlimited note-issue to lull the panic of depositors, and restore the normal business operations of the bank whose stability and existence are in danger.

No doubt in times of crisis the India Government extends its help through the Presidency Banks or the Imperial Bank of India. During 1915-17 when the up country banks in our country passed through a period of crisis, the Government was ready to help through the Presidency Banks, which refused to distribute money and failed in their duty as national banks. Again, in 1922 when the Joint Stock Companies were faced with financial crisis, the Imperial Bank of India offered timely help. But it cannot be expected to fill in the part of a banker's bank as the Central Bank of England or the Federal Reserve of America in our money market and banking system unless credit and currency came to be linked under one body instead of being directed by different institutions with divergent interests as at present.

For the credit backwardness of the country the responsibility does in part rest on the banks themselves. In many cases unworthy men with no knowledge of banking principles and practices and without any banking experience become bank directors and managers. An institute of bankers is to be formed to offer proper training facilities to Indian youths in banking business. The Tata Industrial Bank has made a good beginning in the line. As is evident by the successful working of the Loan Banks in the jute districts of Bengal the employment of lawyers as managers and directors is of value. Add to the legal acumen, which is ever in demand in the business world, they bring to bear their varied experiences, personal knowledge of borrowers, and their sufficiency. Bad debts become fewer, and share-holders enjoy higher dividends. It is no less a blessing to the lawyer. By adding something to his income it aids to solve in part the short employment in the rank and file of the legal profession.

Neglect of sound banking principles is another serious drawback. Most of our banks have not yet realized the importance of maintaining suitable cash balances, reserves, and other marketable assets. They do not seem to keep clear the distinction between secured and unsecured assets. Any body, who enjoys influence with the manager or the directors, can secure advances on promissory notes, which in some cases become bad debts. They not unoften fail to note that the assets of a Commercial Bank should be as fluid as possible, but lock them in securities, which will depreciate in value or cannot be liquidated into money or invest in business, whose chances of success are remote and uncertain. When a bank fails to pay on demand, it closes down its business as legally bound to, and there is an end of it.

As with men so with banks vanity is a drag to real progress. In most cases banks spend too extravagantly on buildings, furniture etc., so as to impress their customers with their prosperity and imposing appearance. Of the size of three Imperial Banks put together, the Lloyd's Bank built at an enormous expense in Chandni Chowk is one of

the finest and biggest buildings in India. Too much impressed by the grandeur of structure, the Joint Stock Companies spend a lot failing to see that internal soundness, the large reserves kept, and the capacity with which business is transacted do really count, and that appearance is the last thing that neither counts nor adds strength.*

If Banks are to thrive on our soil, they should not be permitted to grant unsecured credit to the extent of not more than $1/5$ of their deposit liability. They should be made to maintain a sufficient metallic reserve and the ratio, which the reserve bears to the deposit liabilities, is to be fixed by an Act of State as in the West. Banks should not declare dividend higher than 4 per cent. unless the reserves bear the required ratio to the deposit liabilities. There should be compulsory weekly publication of statements of assets and liabilities in a manner intelligible to the literate lay-man so as to put the customers on their guard and minimize the risks and dangers they otherwise are subject to.

The Statistic Department is to be empowered by law to elicit information from banks relating to the nature and extent of their assets and liabilities which public interest demands. The Bengal National Bank would not have failed so miserably if its financial position was known to the depositors in the few previous years of its failure. Neglect of duty wilful or otherwise as well as dishonesty of all kinds of bank officers is to be severely dealt with, and laws are to be made more stringent. Consideration shown to any such is discretion misapplied. Consideration of public interest is the primary thing that ought to weigh, the rest being merely subordinate thereto. Favouritism it should not have a place for. It should not exist in any form or shape. As elsewhere banks here as well should have a Code of banking laws with a special banking department, with rights and liabilities defined and specified, each being constituted a legal entity, a juristic person capable of suing and being sued.

*Bank Failures in India by Mr. Tarapada Dasgupta, M.A., Modern Review, August 1928.

A Federal Reserve Bank

Lastly, the provision of a banker's bank, a federal reserve as we have it in America is a sheer necessity, without which we can never hope to improve the chaotic condition of the money market, managed as it is by money-lenders without any coordination or cooperation among them, and with banks that lack strength and stability, and work at cross-purposes. It must be free from political influence from within and without, and command the confidence of all. It should not be one that caters to the benefit of a rich few, but to the needs of all interests in the land. It should in other words be democratic in its organization, out-look and action.

But how to get the funds necessary for the purpose is the question. The amount estimated to be necessary for the purpose varies from 65 to 100 crores worth of gold. Whatever it is the amount is considerable, but not beyond the capacity of the country. The Gold Exchange Standard Reserve which amounts to 235 crores of rupees may supply the initial capital. With the laudable object of meeting external obligations and ultimately introducing gold currency into India Lord Curzon as a preliminary thereto introduced the Gold Exchange Standard. The intrinsic value of the rupee was thereby reduced and with the profits accrued therefrom was formed a fund known as the Gold Exchange Standard Reserve. As the obligations are to be met *outside the country*, and as *shipment of gold* as and when the need arises to pay the foreigner involves heavy freights, high insurance charges, and loss of interest during the period of transit, it was thought to be far better to have a reserve located in England than in India. Whatever the force of the argument might have been in the past, if a sound banking system is to be created on Indian soil, and if the spirit of self-help, self-reliance and confidence in banking institutions is to be infused into the people the transference of the reserve is imperative. As Sir Daniel Hamilton says the transference has great capabilities for the future development of India. It may be made the nucleus of a bank on the strength of which debentures to

the extent of 940 crores can be floated. Of this 235 crores may remain as fluid reserve in the shape of gold, silver and guild-edged securities, while the remaining 705 crores of debentures may be utilized for agricultural and industrial progress; 617 crores for liquidating the chronic indebtedness of the Indian farmer on long term loans at fair rates of interest, 20 crores for helping the cooperative movement, 20 crores for Railways, 15 for Municipal bodies, and the remaining 33 for constructing drainage and irrigation works, for combating Malaria in Bengal, and for converting the arid wastes in the Punjab, the United and Central Provinces and other places into smiling fields.

If the Gold Exchange Standard Reserve is transferred and properly utilized, it would advance the material progress of the country as Sir Daniel would have it, would make the Gold Standard for India a reality as Lord Curzon avowed it, and be the nucleus of a Federal Reserve Bank as we want to have it. If the masses are made to realize the benefit of investment in banks instead of keeping it idle or frittering it on lands that yield low returns, if the frozen capital is made to thaw and flow from over the persons of our women-folk and from underneath the bosom of Mother Earth and pooled together in a national banking concern, we should have enough of capital and to spare. The Joint Stock Bank, the first bank under Indian management with an increasing capital reaching over 15 crores of rupees in the course of two decades now occupies the front rank, and is on the list of the 150 largest banks of the world. It is a clear proof of what Indians with but a little experience of business can achieve with efficiency in the domain of banking provided facilities are given.



CHAPTER IV

FOREIGN EXCHANGE

TRADER in recent times has assumed worldwide proportions, and become international in character. No country however backward is left in isolation, but brought within the whirlpool of international trade and subject to the excitement, the fears and pitfalls which every other is. International trade no less than trade in all primitive societies is but simply trade by barter 'the exchange of commodities for commodities', of goods for goods with this difference however that in modern transactions we transmute values in terms of money, and if there be any balance, payment is insisted upon. Even then money does not and need not actually pass. Paper counters or bills of exchange simplify matters, and obviate the necessity of metallic money. To put it concretely. If A, an American merchant, imports articles of the value of £ 10,000 from D, an English merchant, and if B, another American merchant, exports articles of the value to C in England, in the usual course of things A remits £ 10,000 to D in England towards articles received, and C of England would remit a like sum to B of America being the price of the articles purchased. Instead of A sending the money to D in England and C sending an equal sum to B of America, A may pay it to his neighbour B to C's account, and C may pay his neighbour D for A's account thereby saving a lot of expense and trouble incidental to transport. If the amounts do not equal, a cheque or cash for the balance is sent by the one or the other as the case may be.

Exchange Banks

This important function is being discharged by some modern banks, which have come to specialize in this line of business. They conduct exchanges by making payments between persons residing in different parts of a country or in different countries. In business the word 'exchange' has acquired a technical meaning. It denotes documents such as cheques, drafts and bills, which are used for making payments. The business, which these banks carry on, is the result of sale and purchase of goods, and the adjustment of credit relations of a

people with the outside world. The existence of trade balances necessitates the flow of money from the importer to the exporter, the debtor to the creditor, the debtor bank or country to the creditor bank or country.

Adjustment of debit and credit balances are ordinarily made by shipment of money. But shipment involves expenditure for express charges, insurance, and the loss of interest during the period of transit. Rather than incur this all, it is by far more convenient and beneficial to sell drafts and bills of exchange even at a discount so long as it does not exceed the expenses.

As the settling-place and the clearing-house of the world the Bank of England occupies an exceptional position in international commerce. Much the large part of the World's international business is done within its precincts. It has large investments all over the world. English currency has a stability which no other has. A foreign exporter always prefers a bill on London, because it is ready money, and means sterling gold. Foreign trade is done through bills of exchange largely drawn and negotiated abroad, and readily accepted and paid in London.

The Par of Exchange

That exports and imports tally, and there cannot be an over-supply of the one or the other is a well-known axiom in Economics. It follows as a corollary that which is given (exported) is on a par with or equal to what is received (imported). Exchange is then said to be at a par, and there is no question of indebtedness of a country exporting or importing. The need for bills of exchange on or by any there would be none at all. True in the abstract the matter is otherwise in actual practice. Exports and imports do seldom coincide. The total annual exports from India, for instance, rise from 300 to 500 crores, while her annual imports range between 200 and 250 crores. In other words, the balance of trade is always in her favour. In the case of England the imports always exceed exports, and the Englishman often dotes that he gets more than what he exports. But what the Englishman gets in the

shape of imports is not an exact equivalent of the goods he exports. Interest on capital invested abroad, remuneration for carriage of goods in English vessels, pay and pension for services rendered outside, and such others are 'invisible exports' that more or less balance the imports into the country, and should not be lost sight of if the matter is to be clearly understood.

The Mint Par

It is fixed and invariable. It expresses the intrinsic value of the currency unit of one country in that of another, which has the same metal as the standard. A table of the metric weights of all coins is affixed to the Coinage Act of 1870 for easy comparison with, and ready reference to one another. The ratio which the sterling bears to a franc, a mark, a rouble, a dollar and a yen is clearly put. It saves time and trouble, and dispels uncertainty in international commerce. At a moment's notice by a mere reference a merchant may know whether a rate is for or against him. The Mint Par is extraneous to and independent of the coin. It depends on a legal definition, but not on the coin. The English sterling may be debased, the French franc sweated, the German mark mutilated or the American dollar depreciated, the Par remains unaffected.

The Stability of Exchange

The Law of Supply and Demand operates in a bill of exchange as it does in the case of a commodity. A bill of exchange is the outcome of the market conditions of demand and supply in the country where it is drawn, and in the other where it is intended to be cashed. Exporters that have to receive money sell bills to recover money. Importers that have to remit money for articles bought purchase bills to pay off liabilities. If the supply for the bills is greater, it means that exports far outweigh imports. If the demand for them is greater, it means that imports are larger than exports. This apart, one country has to make payments to another for services rendered, for the discharge of debts contracted or to finance a son, a relative or friend studying or travelling abroad. The debts and obligations are met by means of exchange bills which more or

less correspond to a cheque. When imports and other obligations increase, buyers of bills bid against one another. The demand and value of bills rise high.

But there is a limit beyond which there can be no rise at all. Bills are bought because people can thereby escape freight, insurance and other charges which shipment of gold involves. If the value of bills rises higher than gold together with shipment charges, self interest impels us to adopt other kinds of remittances that are cheaper. If the demand, say, for London bills goes high, what a businessman does is to buy bills on some other country—France, Italy or Germany—and send them to his correspondents in one or the other with a request to remit the same to his account at London. If this procedure costs him more or for any reason fails, he takes to shipment of gold bullion as the last recourse. Besides, the exchange dealer does not indefinitely allow the price of bills to rise lest other substitutes or remittances should take its place. If the price of bills rises, fresh suppliers step in to share his gain. He tries to make out a good gain by a reasonable reduction in the offer of a bill without attracting outside competition.

Gold Export and Import Points

Foreign trade is the primary basis of international indebtedness. One country exports its raw materials it produces for the finished articles of another it is in need of. The balance outstanding after adjustment is paid in the standard coin current in one or the other as the case may be, and in the settlement of the same bills of exchange play an important part. The rate of exchange a person gets by purchasing gold in one country and selling it in another is called 'gold export point' while the rate he derives by buying abroad and selling at home is known as 'gold import point'. In both the cases allowance should be made for transshipment, insurance and interest charges that depend on the volume of business and facilities that merchants generally have, and terms that some may secure. Between the upper limit designated 'the gold export point' and the lower one known as the 'gold import point', the rate will rise or fall but no further.

But bills are not all in all. They are only convenient modes of adjusting the indebtedness of one country to another. In the determination of values and adjustment of balances gold is the ultimate factor; for compared with other commodities it has a certain value known to all and fixed by law, a certain price and ready buyers. If the price on London paper rises to the export gold point it is immaterial to the importer or the remitter whether he buys a bill or sends out gold. If the price falls to the import point the exporter or the seller of a bill finds it to his advantage to accept gold.

The Export and Import of Gold and the Consequences Thereof

When the imports of a country are in far excess of exports, and external obligations increase, the export point is over-reached. Cheques and exchange bills do not meet the situation. Hard money and that in the form of gold bullion is required for the purpose. It is to be sent abroad either from the reserves or by purchase of the same. As the wealth of a nation consists, and is preserved in the main in gold, the flight of it would mean a depletion of currency, a low bank reserve and a high bank rate. With no reserve to back it paper currency depreciates. Once begun there is no end for depreciation, which progresses at a quicker pace in its later stages. The lower the value of the note, the larger the issue to pay obligations, and the lower the fall. Depreciation leads to violent fluctuations in trade.

The risk in import trade is so great that merchants suspend business for fear of impending loss. Persons that sell on long term credit, and those that invest on long term loans before the fall in the value of currency stand to lose, while debtors are relieved of a portion of their obligations because of the largeness and cheapness of money.

In connection with exchange words such as 'unfavourable exchange,' 'rise,' 'fall,' 'high' and 'low' are a source of confusion meaning as they do quite the reverse of what they ordinarily mean. An 'unfavourable exchange, is really favour-

able to a people. On account of the low depreciated value of things produced, it stimulates exports, while imports from abroad are discouraged their value either appreciating or remaining as it was. The farmer, the miner, the middleman and the export trader hail the decline in the value of the currency as so much money in their pockets. It is a sort of safety-valve, and a protective duty against free trade and competition.

A 'rise' in exchange means a 'fall' in exports, an outflow of gold, a weakening of reserves, a rise in the bank rate, a depletion of currency and an additional burden of debt as it means an increase of imports out of proportion to the exports.

A 'fall' on the other hand means the reverse—more exports more gold, larger reserves, higher work and greater prosperity—a gain to the farmer, the creditor and the worker.

'Buy high, sell low; the lower the rate, the better the bill' is a maxim well worth remembering. It brings an increase of exports and a decrease in imports with the selfsame results seen above. With this object every advanced state has today so manipulated its currency as to bring about depreciation in its value so that it can 'buy high' and 'sell low', check imports and stimulate exports, strengthen reserves and solve unemployment. This is sought to be secured in two ways: by going off gold standard, and by a reduction of the metallic content of the standard coin. England followed the former course, France the latter, and America both, but of these more fully in the next chapter when we deal with prices.

That exports and imports equal in the long run, and that there can be no excess of the one or the other is a rule which is correct in the abstract. But as a working proposition it has its defects and saving clauses. 'In the long run' is a vague phrase with no certain time limit. It may be a few years or a hundred years hence. The loss and suffering it inflicts on a people in the intervening years is not easy to calculate. Left to itself an 'unfavourable exchange' works its own cure is no doubt a good maxim and sounds well. Nature cure is the best though not always. Trade, currency and exchange are seldom left to themselves to cure their ills.

Exchange between Countries with Different Metals for Their Standard

The universal adoption of gold as the standard has conferred on it an unlimited legal tender quality, while silver is reduced to the position of a mere token coin, and its legal tender capacity limited. Whereas mints are open for free coinage of gold, no such facility exists in respect to silver. The one way to turn silver into money is to sell it in the open market for what it is worth, and get gold coins as by sale of any commodity. The relation between gold and silver being undetermined, and left for market conditions there is no fixed par of exchange between a gold standard country and a silver standard one. Because of free minting, and the charge being small or none at all, the line of demarcation between gold bullion and gold coin is very thin. Nobody hesitates to pay gold coin in exchange for gold bullion while none likes to part with gold coin for silver bullion.

If India were to have a gold standard like the rest of the advanced states, the question would have been far less difficult and less complex. The matter would not have arisen for consideration were she to have no international trade at all. But considering the great variety of products, and large volume of trade she has, this could never be. A token coin though, the rupee is an unlimited legal tender in all international transactions while external obligations and foreign trade are conducted in gold and that through the sterling.

The instability of gold affects those countries that have gold as their standard, of silver those that have it as their standard. But in India the uncertainty of either affects her. But when both are uncertain at the same time with an abnormal fall in the value of silver, and an enormous rise in the value of gold, there is no limit to the affliction inflicted.

Upto 1893 India was a silver standard country, and there was nothing like Mint par between India and England or any other with which she had dealings. Everything depended on the market conditions at the time a transaction took place.

There was no limit to fluctuations. The price of a bill of exchange drawn on London attuned to the market value of silver in terms of gold with the result that a sovereign may equal to Rs. 15/- today, Rs. 20/- tomorrow and Rs. 10/- the day after.

It is an uncertain element in international commerce. If the Indian merchant exports cotton of the value of £ 1,000 when the pound equals to Rs. 15/- at the time, but if by the time the material reaches Lancashire, the value of the pound falls to Rs. 10/-, the Indian merchant is a loser by Rs. 5,000/-. But if it rises to Rs. 20/-, he is a gainer by Rs. 5,000 at the expense of the foreigner.

The India Government annually receives a fixed revenue in rupees while it has to pay a definite sum to the Secretary of State for India in gold towards Home charges and other obligations. The absence of a fixed ratio adds to the uncertainty of international commerce. It leaves little scope for gauging the future market in the light of present conditions and previous statistics, and leads to speculation even in normal times.

The Council Bills

In spite of her immense annual exports India is a debtor country. Towards Home charges, the pay and pension of British officials India has annually to pay about 35 crores of rupees. As the payments are made in England, and as the rupee is not the legal tender, the liability is met by what are called 'Council Bills' drawn by the Secretary of State on the India Government, and the bills are paid out of the funds of the Gold Exchange Standard Reserve located at London.

Both from the point of view of the India Government and that of the British official the method is found beneficial as it avoids the expense and trouble of fresh purchases and from time-to-time export of the metal. As in the case of an exchange bill, the rate of a Council Bill is fixed, but like the other it is subject to the Law of Supply and Demand. There is likewise an upper limit beyond which it does not rise, and a lower one below which it never falls. The gold export point and the gold import point mark the two extremes.

But the sale is not limited to Home charges alone. Towards freights of cargo over the seas, the interest annually payable to foreign capital borrowed, and costs of imports into the country an enormous amount of gold is to be sent. Since the Great War bills are being sold for purposes commercial or otherwise.

If the Secretary of State does not sell bills, say, to foreign merchants for their exports from India, they have to transport gold bullion or sterling to the Indian exporter. The India Government has to re-export the metal wherewith to buy silver and issue rupees. The process is inconvenient, dilatory and expensive. So along-side with the bills sold an equivalent amount of silver, for that represents the demand for rupees, is sent for being minted and issued to the Indian exporter.

The gain to the Government is two-fold, with the rise in the price of Council Bills a profit is made not only on the 35 crores of the Home charges, but on every extra crore worth of bills sold. The British dealers in the white metal as well as its transporters stand to gain. Whereas a rupee is worth 10 d it now fetches 18 d. If the number of bills is limited to Home charges only, there is no gain to the state, the shipping interests, and the dealers in the metal. The Indian merchant that may come into possession of sovereigns in return for goods exported cannot make use of, but must part with them for rupees at the exchange ratio as gold is not the standard and has no legal tender quality.

The Exchange Ratio

To stabilize the value of the rupee, and put foreign trade on a secure basis it is imperative to lay down a ratio. At what rate and with what standard is the question. Is it to be with gold the standard of value in all international transactions? or again is it to be with the pound sterling of Great Britain? To fix the ratio with gold is to make the value of the rupee dependent on the stability of the precious metal, which is the basis of international trade of the modern world. To fix it in terms of the British pound is to restrict, narrow, and minimize the scope and chance of its freedom and stability. There is no denying the stability and value the

sterling has had in the international market. But in the one case what affects the states in general and the gold in particular affects the rupee ratio, while in the other its fortune hangs on that of a single state however strong and rich, and on a single standard however stable its position in the world market be.

The rupee rate is fixed at 1s. 6d. while the generally desired rate is 1s. 4d. a difference of 2d. What does it matter? Why care for the trifle of a two-pence and make much of? A rise in exchange means a fall in the exports and an increase in the imports. It affects the reserves, the resources and the prosperity of a country while it confers an added advantage on the importer. At 1s. 6d. a rupee a £ is worth Rs. 135.4, whereas at 1s. 4d. it is worth Rs. 15/- making a difference of Rs. 1. 10. 8 which represents the loss of the Indian exporter for every Rs. 15/- worth of raw materials sold outside, and the gain of the foreign importer on every Rs. 15/- worth of finished articles purchased.

The immensity of the loss is patent when the figures of annual exports and imports are taken into consideration. While India's annual imports come to about 240 crores of rupees, her annual exports total 300 crores even at the most modest estimate. The gain which the foreign importer makes at India's expense comes to $26\frac{3}{4}$ crores while the loss to the exporter is $33\frac{1}{2}$ crores. The exports being mostly raw materials such as wheat, cotton, jute, oil-seeds etc., the prime producer is hard hit.

To illustrate it further—suppose an Indian is to get £ 3,000 for goods exported. While the cheque issued in his favour would at the old rate of 1s. 4 d. fetch him in Indian coin Rs. 45,000/-, at the present rate of the 1s. 6 d. he is entitled to a sum of Rs. 40,000 incurring a loss of $45,000 - 40,000 = \text{Rs. } 5,000/-$.

The present 18 d. ratio confers an eleven per cent. gain or preference to foreign importers while it inflicts the same per cent. of loss on all our exports.

The point often urged in justification of 18 d. ratio is that India is a debtor country with a multiplicity of obligations to meet. While at the former rate she had to pay at Rs. 15/- a

pound, she is now to pay at Rs. 13. 10. 8, making thereby a gain of Rs. 1. 5. 4 on every fifteen rupees spent for discharging obligations in sterling. But the point loses all force in the face of facts that we meet all our obligations from out of the surplus of our exports, and not by shipment of gold. Our annual exports being vastly predominant over the imports the loss inflicted by the high ratio is far greater than the benefit conferred.

Whereas we could in 1928 discharge our gold debt by, say, 100 bales of cotton we were in 1930 and after obliged to part with 150 bales for the same debt, the prices having meanwhile fallen by 50 per cent. As a matter of fact year after year we borrow more than we pay, and that at the rate of Rs. 13.10.8 a pound and not at Rs. 15/- incurring a loss of Rs. 1. 5. 4.

The ratio being fixed in terms of the pound sterling instead of in gold it is not easy for an Indian trader to calculate beforehand whether a transaction brings in gain or inflicts a loss. There is nothing like mint ratio between the rupee and the standard coins of the advanced states as there is between the sterling, the dollar, the frank and the mark. It is in an indirect sort of way that the value of a rupee is to be struck with any other coin through the sterling, and that by a comparison of the ratio the sterling bears to any of these.

Ours is not a gold or gold exchange standard either though designated as such, but to be more accurate it is to be termed Sterling Exchange Standard as the rupee value is expressed in terms of the sterling. If for any reason the value of sterling rises or falls in terms of any other standard coin, rupee value is likewise affected, and there is no knowing and calculating in India how and when it rises or falls.

Nor did the Exchange Banks that are functioning on our soil devise any means to overcome this difficulty. They do not open any accounts in dollar, sterling or any foreign money. They make money on all exchange operations both by sale and purchase of foreign bills for a commission and at a discount, and not unoften take advantage of market conditions of demand and supply, and of the difference in buying and selling rates on the day of remittance,

The Reverse Councils

The balance of trade being always in India's favour, her external obligations are met out of the proceeds of exports by the sale of Council Bills. The India Office or the Secretary of State pays the holder of a bill in sterling in London. But when the exports are inadequate for the purpose, payments are made in rupees to the Government of India, and at the exchange rate the Secretary of State makes payments in sterling in London. This unusual process is termed the sale of Reverse Councils.

The few years that followed the Great War were years of unprecedented prosperity to India. The price of her raw materials rose high, and her exports increased by leaps and bounds. Her infant industries received a new stimulus. She found herself in a position to offer England 100 million sterling as a War gift and about 60 millions more as a loan.

Her capital spent, her sea-borne trade shattered, England, on the other hand, was at the end of her resources. With America and Japan entering into the field of competition she has to reckon with new powerful commercial rivals. The Britisher that made vast accumulations during the war in India was not inclined to send it Home, and appeals made in this wise were infructuous. Where selfish gain predominates, patriotism has no place. The raising of the ratio to 2s. 10d., twice of what it was, had the desired effect. Within two weeks of the fixing of the ratio in 1922 the English in India sent their savings through 'Reverse Councils' to the motherland aggregating about 120 crores. A good bargain and an excellent offer. Rs. 7.8.0 in India did secure a sovereign in England. The terms offered to remitters were more attractive than any body wished or expected. The sale of Reverse Councils by the Secretary of State at Rs. 7.8.0 a sovereign entailed a loss of 60 crores from the reserves of the Gold Exchange Standard within a month and a half.

It offered a cent per cent. gain or preference to English exporter over others while inflicting a loss on the Indian producer. Exports from India fell from 327 crores to 245 by 1921-22 while during the same period foreign imports increased from 208 to 226 crores of rupees. The exports of England

into India rose from 105 million sterling in 1919-20 to 205 million sterling in 1920-21 while there is a decrease from 97 to 50 million sterling in India's exports into England.

The Karachi Chamber of Commerce run by non-Indian merchants was constrained to say that 'the Government of India were selling pounds sterling every week on terms far more favourable to the public than the public themselves asked for'. On the Indian public it came as a surprise, but persons in the know of things made full use of it, remitted every pie they laid by at this exceptionally favourable rate, and brought it back at Rs. 15/- a pound, a cent per cent. profit in a short while, and that for no sacrifice made or trouble undergone.

If the 1s. 6d ratio is injurious to India's interests it needs no argument to show that the 2s. 10d. ratio is more so. But it strengthened the financial stability of England, improved the dollar exchange ratio, increased exports, added to reserves and lowered the bank rate from 6 to 3 per cent.

In India it affected one and all. The Indian merchant imported finished articles at the rate of Rs. 7. 8. 0 a pound with the hope of selling it for a profit. But whereas he parted with these at this rate, he had to pay at the rate of Rs. 15/- a pound. The payments made at this rate came to 300 crores, while bills paid in part or totally repudiated approximated to 30 crores.

The export merchant and the prime producer suffered no less. The adverse effect which a high exchange rate would have on gold reserves and interest rates needs no reiteration. Port Trusts, Corporations, Municipalities, Local Boards and other public or private undertakings unable to secure the requisite capital at home borrow abroad at high rates sometimes losing their indigenous character. To make up the heavy deficit and meet the budget the state is to levy fresh taxes.

The other course open is to borrow in India's name at 7 to 8 per cent. abroad thereby adding to the weight of her national debt. The several indigenous industries that owed their origin and impetus to the Great War could not withstand the stress and storm. The chances of investment being great

and the rate of interest tempting, foreign capital flowed in once again. The Government Securities, which were once held by the Indians, passed into their hands at cheaper rates.

But this was not without its reaction on England. An impoverished India proved to be a bad market for the finished goods of England with the consequence that her import trade had considerably fallen.

Linking the Rupee to the Sterling

To the great surprise of the world on the memorable morning of 21st September 1931 England was off Gold Standard. Few at the time could fully appraise the reasons and the consequences of the stupendous step. Her reserves largely depleted due to sudden withdrawal of foreign deposits in the Bank of England, and she found it hard to meet the annual War debt instalments to France and America. Her commercial supremacy was threatened by America and Japan. With shrewd practicality the Englishman aimed at a double object with a single stroke of the pen. For an unspecified period England would suspend all payments to creditor countries, and cut off the ratio which the sterling bore to the dollar, the franc, the mark, and other gold standard currencies. Fearing a crisis and a common catastrophe, France and America not only suspended the period of payment for all, but advanced huge loans to alleviate the situation and save England and through her the international world of commerce and finance. The suspension of the gold standard brought in depreciation in the value of the £. Though the mint value remained as ever, the metallic value of the coin fell. While the relation of the pound with other gold standard is severed, the ratio which the rupee bears to the pound is maintained as ever.

Three courses are open to us under the circumstances; (i) to leave the rupee to find its natural level, (ii) to link it with gold or (iii) link it with the £. Of these the last is preferred.

Leaving the rupee to find its own level would absolve the Government as currency authority to maintain a fixed buying or selling price of gold. The exchange value of the

rupee would tend to conform to the sterling in England, to gold in the gold standard countries, and to the relative price level in India. It in other words is the virtual adoption of the 'purchasing power parity'. It demands constant vigilance and control for its proper working as everything depends upon market conditions. Exchange as we have seen, is determined by demand and supply in the Exchange Market, and varies from day to day. Accurate price indices would become indispensable as no ratio subsists between the rupee and other standards directly or indirectly. There would be no Reverse Councils to support the rupee exchange as we have had. Foreign exchange would become an unstable operation, and British investments in Indian Securities would in consequence become fewer. It would lead to uncertainty and speculation in the field of finance and commerce.

But it would raise price level of raw materials produced in the country, and bring in larger income to the prime producer. Debtors would be in a better position to meet obligations. It would offer a higher per cent. of preference to our export trade than the levy of protective import duties, and passing of the Safeguarding of Industries Act, and bring in depreciation in the currency as going off gold standard has done in the case of gold standard countries. It would enable us to secure better profits, provide against foreign dumping, and withstand competition. It would preserve gold reserves as no Reverse Councils could be sold.

Our sterling obligations might be met by accommodation with Great Britain or by purchase of sterling in the open market. The rupee would then find its own level, and its gold parity could be put on a statutory basis. But the question is difficult, complex and grave.

The third alternative is no new device. In dealing with exchange ratio we have said something about it. To the facts noted a few more now need be added.

New factors in and out of India have in recent times accelerated the ratio to her detriment. Because the

severance of sterling with the gold currencies and of the link stability in terms of sterling means instability in terms of gold. It introduced an element of uncertainty in our foreign trade with countries on a gold standard. The dollar rupee rate and the 'yen' rupee rate moved against us and the instability resulting is worse than the one likely to occur were the rupee left to itself. England was able to secure the requisite amount of gold to replenish her depleted reserves, and make timely payments of her war-debt instalments to America. But in the matter of her export trade she could not for long enjoy any advantage as Norway, Denmark, Germany, Japan and America divorced gold standard. Again to resist the inroads of depreciated currencies countries like France, Spain, Italy and America, raised high tariffs. But Japan and America by a large per centage of currency depreciation, and manipulation, and by great economies in the matter of production and sale have paralysed international trade, and led to a world catastrophe upsetting all currency systems.

Since the Great War agricultural and industrial countries have considerably depreciated their currencies to suit the changed economic conditions of the present world. England has depreciated her sterling by about 33½ per cent., Japan, Australia, New Zealand by 50 per cent., Canada by 30, and America by 40.

India is the sole instance of a country with an appreciated rupee ratio. The rupee is no longer regarded as equivalent to 18 d gold, but a token representing a fraction of the depreciated sterling. That the disturbance of the 18 d rupee ratio would shake off the credit of the country is a proposition strange and unsound. France, Belgium and Italy did not lose credit on this account. England, America, Japan, Australia and New Zealand have not in the least suffered in credit because of depreciation. Would the critic want us to believe that a poor and starving nation would have better credit than a rich and solvent one?

Nor does the plea that the appreciated ratio is in the best interests of the wage-earner hold good in the face of facts

The fall in the internal prices, which the appreciated currency brought about, reduced wages by 50 per cent., and restricted the opportunities of employment. When the scope for work is narrowed, and the money earned is reduced by half, the fact that prices of necessities are low is no real relief to the labourer. It may again be said that the recent slump is not peculiar to India, but a wave of the general depression that swept over the world. But whereas the truth of it cannot on one hand altogether be denied, it cannot on the other but be admitted that a lower ratio would go to relieve the situation. The intense spirit of nationalism, the imposition of high tariffs and discriminatory trade barriers, the abandonment of gold standard and depreciation of currencies created dangerous abnormalities, which, if neglected and not properly tackled, would spell ruin to a people. The following export and import figures for the last half a decade beginning with 1928 do bear ample testimony to the truth of the statement.

		Exports	Imports
1928	(Crores of rupees)	319	250
1929	"	330	253
1930	"	310	240
1931	"	220	164
1932	"	138	136

Since 21st September 1931 when England was off gold standard up to the end of December 1933 the trade balance being against India, there was enormous contraction of currency amounting to about 150 crores of rupees and an equal amount of distress gold was shipped to foreign lands largely due to the high exchange rate. The terrible shrinkage in the favourable balance of trade has most disastrous effects on every class in the country.

To appraise the magnitude of the loss the reader may well recall to mind the Law of Marginal or Final Utility which says that the last unit of a thing determines the price of it as a whole. Immense as our exports, our internal trade is more immense still. Though statistics are not available, it is estimated that our internal trade is 15 to 20 times as large as the

external. There can be no two rates one for exports, and one for internal trade. The low rate on exports is one ruling rate for all the stock set for sale.

Calculated on this basis the loss inflicted on the agriculturist is quite staggering. Even the most modest calculation brings the annual loss on internal trade to 500 crores in addition to the loss of $33\frac{1}{3}$ crores on annual exports. A period of falling prices has a most dreading effect on enterprise, progress and well-being. Again, it is to be recollected that in the march of modern progress money has no inconsiderable part to play. If it fails to function, civilisation would be at a stand-still, and life thrust back to the age of barter.

To leave the rupee to find its level would lead to violent fluctuations in foreign trade, and throw the machinery of foreign exchange out of gear. To continue the 18 d ratio would have most disastrous effects on Indian interests. The one proper course under the circumstances is to derate so as to make it fall in line with the rest of the world currencies, and secure the needed protection to indigenous industries, and profit the Indian agriculturist. For a cart-load of cotton or groundnut the tenant gets £ 3 which at the present rate of 18 d gives him Rs. 40 while at 12 d it would give him Rs. 60, 12 d ratio offers the Indian farmer the long-needed succour. The $33\frac{1}{3}$ per cent. depreciation of the exchange rate which it brings about together with the 21 per cent. depreciation which the linking of the rupee to the depreciating sterling has secured would put the Indian producer and trader in a position of vantage in the matter of competition while the reopening of mints for silver coinage would drive out the money famine from our midst. 12 d is the ratio which the rupee ought to obtain till times get normal and 16 d ratio is restored, or gold standard established. But the several acts that are and yet to be, the Agricultural Loans Act, the Debts Conciliation Act, and such others, on which the legislator pins his faith for rural relief and economic uplift, do miss the mark.

CHAPTER V

HIGH PRICES

A thing, as we know, is valued because of its utility and rarity. Money is valued because of its capacity to secure the thing we want. Price is said to be high when much money is required for the purchase of a thing, and low when the same quantity can be had for a lesser sum. A rise in the value of money means a fall in the level of prices. A rise in the level of prices means a fall in the value of money. It is the same thing looked at from different standpoints—money or the article purchased. The expression "rise or fall of price" connotes that on the average struck of things sold and consumed at any particular period the one or the other predominates. There may be fall in the price of a commodity or a few commodities but on the whole a general rise. A rise or fall in the value of commodities bought or a rise or fall in the value of the standard coin in circulation will bring about a change in price, the first and last a rise, the second and third a fall in general price.

The quantity of money, the velocity of circulation, and the volume of trade are the main factors that determine the general rise of prices. Either singly or in combination they bring in a rise in the absence of counteracting forces. Abundant supply of money, the rapidity in its circulation, and a decrease in the number of total purchases lead to a rise while a scarcity of supply, a slackness in its circulation, and an increase in the number of things purchased would have quite the opposite results, other things remaining unchanged.

The Quantity of Money

The greater the amount of money in circulation, the higher the price. Money in circulation does not mean the standard coin merely. It means and includes all other categories, standard and token, metallic and otherwise. Paper

currency is no less potent than metallic money. And whatever contributes to an increase of or addition to any of these, works in the direction of a rise.

The enormous output of gold and the increase in the production of silver from a variety of sources have the same effects on the rise of prices. The rapid development of banking has likewise by creating deposits, cheques, notes, and bills increased currency. In India the Great War gave a stimulus for the starting of new banks, and increased the work of existing ones. More than 120 crores of rupees worth of notes were issued the Paper Currency Act being amended in 1914. Notes of low denomination, the rupee and the two-and-a-half-rupee notes, were issued in large number.

The value of money no less than the value of a commodity depends upon demand and supply. The great inflow of silver between 1870-1893 into the land led to a continuous fall of silver in terms of gold, though, on account of the vastness of the area over which it was diffused, the great increase in the volume of foreign trade, and the force of custom in regulating inland prices, the effect was for long slow and imperceptible.

With the continued fall of silver new difficulties cropped up for solution. Whereas the India Government received its revenues in worthless silver rupee, it had to meet foreign obligations in sterling gold. By 1892 Rs. 16/- were worth a sovereign. This increased the burden of the Home charges interest on foreign capital, and the price of stores from the Home Secretary. To pay the same charges in gold more rupees were needed than formerly. This apart, the forecasting of the budget was next to impossible as there was no knowing when and where this fall would stop, and this is to be met by additional taxation. It likewise bore hard on the British Official serving in India. The savings made in silver rupees would when sent home but fetch fewer sovereigns than before. Anglo-Indian investors in India lost a good deal. So also the foreign importer as the money he receives in India

counts low in terms of sterling To the Indian producer and exporter it gave a great stimulus as every sovereign of goods sold secured more rupees.

As a solution to these exchange difficulties international bi-metallism was sought with the cooperation of the leading powers of Europe. It having failed the Government of India had as an alternative adopted the recommendations of a committee appointed to study the problem. Mints were closed for private coinage of silver in 1893; and in the course of six years that followed the enactment, rupee value appreciated to 16 d. There was a lowering in the intrinsic value of the rupee. Whereas the intrinsic value of the rupee sank to 10 to 12 annas its face value remained at 16 annas. Though the value of silver considerably fell, the value of the rupee was maintained by a *restriction of supply*. Since 1900 India's export trade was on the rising curve.

During the war our exports increased further. The money issued did not depend upon the internal financial requirements of the people, but on the demand for Council Bills in London and the gold offered for conversion and payment in rupees. Once issued rupees remained in circulation whether wanted or unwanted. There was no provision for their withdrawal. They could not be exchanged with sovereigns, and being token coins could not be melted either. In this respect a rupee was no better than an inconvertible currency note with the result that there was an inflation of currency, a redundant money, and a general rise of prices. By 1914 there was 300 crores worth of money in circulation, 240 crores of rupees, 30 crores of token and 30 crores of paper. During the few following years 200 crores of coins and 30 crores of paper were added to the existing currency.

The Velocity of Circulation

A coin or a note may be said to rapidly circulate if it frequently changes hands. The larger the business, the greater the number of times of circulation. If say Rs. 1000

change hands 10 times in the course of a month the volume of business done or the worth of goods bought would be $1000 \times 10 = \text{Rs. } 10,000$. If money remains idle or hoarded, there is a curtailment of trade to that extent. Provided money circulates freely and rapidly, much business can be done with little money. Where wages are paid by the day and spent for immediate purchase of necessities of life, the value of things purchased would be thirty-fold in course of a month. Where weekly payments are made the value of goods bought would be fourfold. In the case of salaried officers, who receive their pay monthly or once in three or four months as was generally the case in private service in recent years, free circulation is fettered. Money circulates more rapidly in a commercial country than in an agricultural one, in an active industrial centre than in a dull out-of-the-way village. A rise in price may as much be the result of a rapid circulation as an addition to the currency.

The Volume of Trade

Human wants have multiplied, and there is an ever-increasing demand for luxuries and amenities of life. With the growth of science, the mechanistic methods of production, the policy of free competition and the facile means of communication, the volume of trade has increased a thousand-fold, and with it the need for large sums of convenient money. The expansion of trade is however a force that runs counter to and works in quite the opposite direction of the two foregoing factors.

Money must be capable of adjusting itself to the exigencies of trade. When natural adjustment is not possible, untoward consequences follow. When there is an expansion of trade with no corresponding increase of currency the result is deflation and lowness of price. If trade contracts, but currency does not, it would be a case of inflation of unwanted money remaining in circulation pushing prices high. The increase in the volume of trade was not commensurate with the increase of currency and its circulation.

Wants and Population

From decade to decade world's population is on the increase. Medical science, hygienic principles, and high standard of living have warded off disease and early death. As evidenced by the census reports of recent decades population is increasing. More population means greater demand for things of every day consumption, and higher prices. Add to this the standard of life has risen. People are no longer content with the satisfaction of primary wants. What would have been a thing of luxury to our forefathers is with us a necessary of life. Variety-seeking and fashion-hunting are gaining in currency. The demand for food, dress and other amenities is now greater than ever. The quantity of money, and the rapidity of its circulation, the growth of population, and the increase in the quantity and variety of things consumed bring about a rise in the general level of prices.

But with what effects remains to consider. A period of rising prices is welcome to the prime producer, the industrialist, the trader and businessman. But it is often said that wages of labour being fixed once for all, and that labourers being in a disorganised state, they cannot be sharers in the gains made. A period of rising prices is one of acute distress and suffering to the labouring classes, who form a majority in every country. It is no less a curse to the low salaried officers whose incomes are fixed and invariable. Money-lenders are at a great disadvantage as for loans given when money was dear and appreciated, they would be paid in valueless depreciated currency.

Whatever is said to the contrary a sharp general rise is to be desired—especially in a young country like India. Agriculture being the primary occupation of the large bulk of the Indian masses, whose indebtedness is proverbially high, a general rise in commodity prices is indeed a great relief and the sure way for debt clearance. With the increasing availability of abundant capital, which a rise makes possible, to finance trade and industry, old concerns work more vigorously, and

new ones spring into existence. It cannot be said to inflict a hardship on the Indian labourer either, for, unlike in the West, wages here are more or less regulated by custom, and remain untouched be the prices high or low. The stimulus given to industrial development increases the opportunities of employment, and the continuous incomes reinforce demand for commodities. Unless strikes or labour troubles intervene, high prices lead to an even distribution of income and peaceful development of commerce. To a people who are heavily indebted, and whose national debt is fast mounting a general rise is the way to certain redress. By increasing the purchasing power of the mass of mankind it stimulates trade and industry.

Low Prices

The world has recently passed through a period of unprecedented fall of prices. Whether termed low prices, trade depression or world slump or whatever name it goes by the thing is the same. Commercially no country today is independent. Commercial internationalism is a world force, and whatever affects production, consumption, currency and credit of a country affects prices. In considering the price level in India external and internal forces that are general and peculiar to our country are to be taken into account.

The quantity of money and the demand for it, the quantity of commodities and the demand for the same are factors that determine general prices. A rise in the value of the standard coin, and a fall in the value of commodities combined or each by itself lead to a fall in prices. When the value of gold rises, less of it would be required for the purchase of, say, wheat, and the price falls. If both gold and wheat change in value at the same time, the result would be either a fall or rise according to the direction and the amount of change. If the change is in opposite directions gold rising and wheat falling, the fall in wheat price would indeed be great. A severe fall in prices may be caused either by over-production or under-consumption, by

high tariffs, by mal-distribution of gold, by new substitutes, by a sudden drain of gold, or a general contraction of credit that causes great shrinkage in the total supply of money

Over-Production

A general rise in prices is a violent stimulant to trade. A period of high prices is followed by a period of low prices and trade depressions. It leads to fraudulent speculation with its tendency to over-trade. Over-production is the result of over industrialization, and over-trade is the result of cut-throat competition. The natural tendency to superior efficiency brings about additional cheapness of production. To drive his rivals in business out of the field, the larger investor increases his output enormously. The old trader clings to his selling connections to balance his rival's extra cheapness. Science is developing with marvellous rapidity, and inventions are pretty common. Things are produced not so much to meet a known demand but because of the capacity that machinery offers to produce, and if demand is to keep pace with it, it is to be stimulated by every mode of artistic advertisement. The whole of Western Europe has specialized in machinery, and in the Asiatic countries it has or rather had an immense outlet for its finished goods.

But owing to the industrialisation of America, Japan and other countries, the tables have turned. Russia and India industrialised, and, the ominous signs are not invisible, the picture would be quite dark and gloomy. In the production of wheat, for instance, America is far ahead of every other state. Scientific methods and capitalistic farming have increased her production thirty-fold. The output is so great that a part of it is to be destroyed or thrown over-board to clear the barns, and prevent the fall in price below the cost price until her ingenious sons have found a new use for it, by substituting it for foreign coal in their mills and factories while tens of thousands that once worked the mills are on the brink of starvation. The point is not peculiar to any but

illustrative of the plight of every state that pins its faith to machinery for economic salvation.

But there are some who say that 'there can be nothing like general over-production', and that the term is a mere abuse of language. Since goods are exchanged for goods in the long run, all that is wrong with the world is only a temporary break-down in the machinery of exchange, which a little common sense might set right. General over-production, say they, means that those who made the sacrifices in the production and sale of goods have to wait a longer while than they expected before they reap the reward which they claim as their own. Waiting is not always easy. So producers have to let go their profits and something more.

They say that there can be no over-production of the good things of the Earth so long as a single want remains unfulfilled. As a matter of fact numerous wants remain unfulfilled because of the want of means wherewith to purchase them. When unemployment is ripe, and the purchasing power of the masses is at the lowest, it cannot but be otherwise. They over-look the capital fact that goods are the embodiment of past sacrifices, and that time is the essence of the thing, and has a value of its own apart from the intrinsic value of goods. When the output is large, a little delay involves serious loss because of the great labour and capital involved, and of the loss of interest and deterioration in value.

Under-Consumption

The difficulty of adjusting production to the fluctuations of demand causes over-production. The difference in the rate of output, and the rate of sale represents the amount of over-production. This is brought about by an increase of supply the demand remaining constant or by a decrease in demand when the supply remains constant. When the supply increases, and demand falls, as it was recently, the trade position would be terrible indeed. Demand pertains to future, and there is always an element of uncertainty about it. A change of fashion or a change in taste,

a new substitute, a flood, an earthquake or a war may shatter all calculations, and by lessening demand may lead to over-supply.

The wholesale introduction of over-mastering machinery has made depressions a permanent feature of modern economic system. It is ascribed to some material cause such as the wasteful expenditure of millions for sinews of war, the destruction of property by a frost, a flood, a hurricane, an earthquake, and the failure of a cotton crop in America or a cereal in some part of the world. There is no gainsaying the fact that machinery is at the root of depressions though these do add to the gravity of the situation whenever they occur.

High Tariffs

Protection is the cry everywhere. It is looked upon as the panacea for all economic ills—the one sovereign remedy for acute unemployment, and deficit national finance. America, Germany and France have long been wedded to it, and England, the champion of Free Trade, though not without some hesitancy, accepted it as the one that fits in best with her existing economic conditions. England offered payment of her war-debt instalments in cotton and other finished articles. America refused because it would mean flooding her over-flooded markets, because it would mean less money in the pockets of her manufacturers, and no employment to her workers.

Turkey, Syria, China, India and others are like the rest growing more and more nationalistic, and want to work out their economic regeneration by too close a policy of protection. Every country wants to send as many exports as possible, but receive few imports or, if possible, none at all. Cold cash or hard bullion at the expense of others is the selfish aim of all. Behind high tariff walls a sound economic system is sought to be built. Mass production has increased, markets are glutted and prices fallen.

Mal-Distribution of Gold

With the Great War political power and economic prosperity have gravitated from Europe to America. During

the insecurity of the times people felt that America was the safest place for the custody of gold. The Protectionist policy she pursues, and the rise in her export trade during the war have greatly added to the store of her gold. The currency inflations, which the war has given rise to, led to the flight of gold from one continent to the other. From time to time America received colossal sums towards war-debts and interest thereon. Inflations ceased, and currency stabilized, but capital being timid did not move back. About 30 per cent. of the World's output of gold is being locked up in America alone, while the reparation clauses, and the policy of self-sufficiency have put France in possession of about 25 per cent. more.

Contraction of Credit and Currency

War reparations fastened on Germany by the Treaty of Versailles amounted to £ 6,600 millions. She found it impossible to regularly pay the instalments. England lent to the Allies excluding Russia a sum of £ 1,300 millions, and in her turn owed to America £ 945 millions. She received not a farthing, but thought it a point of honour to pay to the full. The reparations and War-debt payments led to disproportionate accumulation of gold stocks in France and America, and extreme deflation of currency in the debtor-countries. Capital became scarce, currency dislocated, and industry and trade paralysed.

Besides, nations like individuals took to indiscriminate borrowing, and so long they could get money there was a semblance of prosperity. But when America refused further advances, and insisted on the payment of debts and interest, they appeared in their true, bald state. The general aversion to receive imports or payments in kind either raw materials or finished articles, added to a policy of protection and self-sufficiency did not allow mal-distribution to have its natural normal corrective by a free flow of gold from land to land. Worse still, except in India, there is an embargo on gold export in every state.

For ages England had been the World's credit market. Ever since she joined the Allies America flung her moneys to the Allies. Nations borrowed beyond their capacity to repay. But when it came to a question of reckoning and repayment in the early thirties of the century, there was a sudden drying up of the flow, and the nations that hoped to live on credit found themselves in a slough.

Times grew nervous. Banks restricted the issue of cheques, notes and bills not liking the idea of being repaid in depreciated currency. With the locking of securities on long term loans bank failures became a common phenomenon. France withheld short term credit from Germany, and pulled out of America every frank held in there. The Rothschild Bank of Vienna, one of the most powerful international banking concerns failed, and the fears that others would follow suit paralysed business.

Credit is so sensitive that a small narrowing of it amounts to a temporary destruction of a large part of it. Any drain on supply or demand of money does likewise affect the currency of a country. Unfounded fears of England's ability to meet her obligations in gold led to foreign withdrawals from the Bank of England and forced her to be off gold standard thereby bringing in a new element of uncertainty into the financial world. State after state went off gold standard, and considerably depreciated their currencies so as to 'buy high' and 'sell low'.

Nor is it all. In some cases National Governments have by state grants and subsidies encouraged regular dumping of foreign markets. The over-flooding of the Indian markets by the cheap Japanese cloth, and those of Europe by artificial silks and hosiery articles have forced down prices.

Artificial Products

Add to over-production due to improved methods and capitalistic farming, synthetic Chemistry in recent years is responsible for the manufacture of artificial products on a commercial scale so as to displace natural ones from the market. Though India has a natural monopoly in jute, it is being re-

placed by other kinds of fibres such as hemp, while our ground-nut is in danger of being ousted from the foreign market by soya bean from Manchuria. Japan has largely driven natural silks of India, China, France and Italy by her artificial silk goods. Natural sugar is in fear of sharing a similar fate on account of the sweet stuff, which is being prepared by Germany out of obnoxious waste. The discovery of indigo by Baeyer of Germany in 1880 from coal tar, which was till then considered a useless by-product of the coal gas industry, sealed the fate of the important agricultural product, and completely eliminated it from the field of competition*.

Market Conditions

To the general causes a few more peculiar to India need be added. From year to year the Indian farmer produces as a matter of course ignorant of the market conditions abroad. He does not know the conditions of the inland market, much less of the foreign one. He is ignorant of the future market, Indian and foreign alike, and there is no Statistical Department to keep him in the know of things, to put him on his guard, to regulate, control and direct production when necessary.

The Question of Currency and Exchange

With the enormous import of the white metal the value of silver fell to half of what it was, but the rupee value has remained at 18 d. The rate fixed is high. Though the sterling gained in stability, the rupee cannot depreciate to find its natural level. The appreciated rupee value brought about 50 per cent. fall in the commodity prices with the result that India was at a serious disadvantage in competition with countries with depreciated currencies. There was a phenomenal fall in their exports, the trade balance became adverse, and foreign obligations were to be met by shipment of gold. Prices fell, currency contracted, credit sank and debts swelled.

* The existing ruins of indigo factories (*Nili kundies*) in parts of South India bear sad testimony to the fact.

The rise in the ranks of the unemployed, the retrenchment schemes, the cuts in salaries, the irregular payment of salaries, and the frittering of wealth in quest of pleasure in foreign lands add to the gravity of the situation.

Over-production or under-consumption of wealth, a drain of gold or a gradual contraction of currency and credit, a new substitute, a war, a flood, a famine or an earthquake may each by itself cause a depression. But when all these combine and conspire against man as recently, lo! the result is too terrible to speak of. ¶

The Effects

A period of depression or low prices is far more deadly than a flood, famine, plague or pestilence. While the latter is at any time confined to a particular locality the former is under modern conditions all-pervading and co-extensive with the world. Whereas the latter at the most causes havoc in the existing general state, the former makes permanent inroads on the health, strength and wealth of the rising one.

With the fall in price, and the slackening in demand, factories are either closed or on short work. New recruits swelled the ranks of unemployed. Hundreds of thousands are forced below a decent standard of living, and scores of thousands are on the verge of destitution, while thousands suffer from mal- or under-nutrition. In the industrial centres plaintive wails of the weak, and bread riots of the hungry are a familiar sight.

From the prince to the peasant everyone in the country is more or less affected by the phenomenal fall. Agricultural prices are low and depressed. The income of the vast bulk of the population is at its minimum. Natural adjustment of prices, wages and debts has become an impossibility. If there is a fall in the obligations and debt burdens corresponding to that of agricultural production, there would be no suffering and no grievance. But loans, rents and revenues expressed in terms of money and payable under contracts are independent of economic laws. Burdened with long recurring debts contracted at a time when the rupee was worth less in

terms of commodities, the Indian farmer has to part with one and half the times of the produce to meet obligations the fall being about 50 per cent. He has to meet the situation by retrenchment of his budget, by withholding payment to the money-lender and the landlord in part or as a whole, by sale of gold ornaments, and by further borrowings.

The poverty does not rest with and confine itself to the agriculturist alone. It reacts on other interests and classes and confronts them with dire calamity. How, in what manner and to what extent, reader may well be pleased to recall to mind the points described in connection with the exchange ratio.

The money-lender, the merchant, the doctor, the lawyer, the landlord and the prince has each his own share to bear.

The Government is not an exception either. Low prices have worked havoc with public finance as well. With the fall in trade there is a fall in Governmental income, in the land revenue, in the export and import duties, and in other taxable varieties. Cuts and retrenchments are unpopular and strongly resisted. They alleviate, but do not permanently meet the situation. To meet the budget has become a problem and a task.

Remedies

The world has passed through a dark and dismal period perhaps the darkest and the most dismal since the world began, the picture of man and machinery at their worst. No peoples and no governments are quite immune from its visitation. With no territorial limit set to its jurisdiction it deals with all with an even hand, a heavy and a hard one too. In bitter anguish people cry 'is there no remedy and no way out?' Different economists suggest different remedies, and different countries follow different methods, but none so far with complete success. The disease is deadly, the complications are great—hard to diagnose, and harder still to cure. Bimetallism is an oft-suggested remedy. But if it is to be effective it is to be

international in character. National bimetallism is, as we know, worse than the disease it is intended to cure. The difficulties and dangers apart, international bimetallism is not feasible for the simple reason that the advanced nations are not unanimous, and not prepared for any one common line of action.

The conference convened at Paris to promote uniformity of action in international money matters was a dismal failure. All except Holland made it a point of honour to adopt gold standard and stick to it. The other at Brussels fared no better. The American delegates favoured the coinage of silver by nations at a ratio to be agreed upon. Belgium, Holland and Switzerland opposed, Germany was not even represented, France maintained a waiting attitude, and England set her face against the modification of her system. Theoretical dogmas however logical would not satisfy her practical sons. Gold standard has brought prosperity to her shores, and she would not risk on any other.

The War-debt burden has dislocated international trade. Unless and until the War-debt agreements are revised in such a way as to remove the strain on the economy of individual nations, and stabilize exchanges there can be no solution for the world depression. This would entail heavy loss on creditor countries such as France, America and England. But if contracts are insisted upon as sacred and inviolable, all countries, creditor and debtor alike, must be prepared to face a common catastrophe.

England shows her readiness; and favourable gestures by way of Hoover Moratorium and Roosevelt's acceptance of token payments for June instalment of 1933 are not wanting on the part of America, but France is insistent. As in the former case the love of selfish gain and the spirit of narrow nationalism are too strong for a common international action.

The dearth of gold, and its inability to function as the standard are put by some economists at the root of the present depression. International paper currency, say they, like paper currency dispenses to a great extent with metallic money, and

makes large transactions possible. The imperfections of currency are due to its being dependent on one metal or other. Over-supply or under-supply of either will lead to the instability of currency. With no supply price international paper may be said to be free from such uncertain factors. As an ideal it is no doubt well in its way and if achieved, may bring in happy results. But nations have grown too individualistic. The wordy professions, and the world conferences notwithstanding, hypocrisy, insincerity, mutual distrust, international jealousies and rivalries leave no room for international cooperation and united action.

Uneven distribution of gold is according to some the cause of the trouble. Let there be free flow of the metal, and everything goes the right way with the economic world. But mal-distribution is the result of accumulation in America and France due in part to high tariffs and trade barriers and in part to balance of payments.

But how? is the short question. These countries must either lend more money or import more goods both raw and finished. As matters are, neither course seems likely, and the question remains as ever.

With the growth of a feeling of narrow nationality since the Great War economists and politicians have come to look at things from the point of individual nations. Protection and cooperation have become articles of faith within small circles and groups. Free trade and competition are now more a matter of policy in external trade with a view to exploit and profit. If normal conditions are to obtain, the currency depreciations, the protective and preventive tariffs and the dumping of foreign markets, which the nations have launched upon, ought to go.

The remedies sought do but touch the fringe of the problem. The universal adoption of bimetallism, of international paper currency or the even distribution of gold would but effect a partial cure of the complicated economic malady in so far it relates to faulty currency systems. The abolition of interstate trade barriers would likewise put an end to the ills of too close a policy of protection. But it is a wrong

assumption to make that one or the other of these would restore normal state of things. It is the fallacy of specialization. Experts often fail to see things in their due proportions.

Though often over-looked, over-production is the root disease. Under-consumption that lowers the price level is the same thing as the other expressed from a different viewpoint. The one is from the point of the producer; the other from that of the consumer. If demand increases and keeps pace with production, everything goes the right way. But demand has slackened on account of the overpowering mastery of the labour-saving machinery, and the purchasing power of the bulk of humanity all the world over has sunk to the lowest on account of the increasing unemployment that follows wholesale industrialization.

A decrease in the ranks of the unemployed means an increase of work of mills and factories, which cannot but result in over-production. Economical production and equitable distribution are what the industrial world now needs. Free trade and cut-throat competition are to be brought under control.

If machinery is to be a real blessing, shorter hours, higher wages and greater leisure are to be ensured to the worker. A uniform four-hour-day with no reduction in the wages paid may solve the problem. But how? Would the industrialist forgo a farthing of his profit? Would he agree to share his income with the labourer? The capitalist sits in his pew on Sunday and hears the parson preach against wealth, and goes the Monday morning to add pile to pile forgetting his duty to man and God.

Money has come to be the end of life—the one thing worth having and worth striving for. Man in his atonement with Mammon has forgotten the moral value of things. Faith in God, trust in man, the desire to live and let live, the need for peace, justice and fair-play, and a genuine concert for the good of all is what the mechanically-minded world sorely needs.

CHAPTER VI

GOLD STANDARD FOR INDIA

A Potent Factor in the Stabilization of World Prices and Currencies

THE remedies followed by individual states do but meet the situation by halves. In a world seething with intense economic nationalism, concert action in international matters is beside the point, and to follow any other is unwise and suicidal. When leading nations become economically aggressive, the instinct of self-preservation requires that others should depend on themselves till the folly is recognized and the scramble for the yellow metal ceases. To escape the uncertainties of foreign trade markets nearer home must be ensured. With the lowering of the exchange rate India would cease to be the dumping ground and her sons would have the long needed protection to foster their industries and agriculture. But the adoption of the gold standard would besides improving her economic position would simplify the complexities of her exchange questions, stabilize the value of the yellow metal and the general price level throughout the World.

Combining as it does great value in a short compass no other metal serves the exigencies of modern commerce so well as gold. India and China are the two unfortunate lands, which still do the vast volume of their internal business in coins other than gold.

With us it is an age-long problem. For over three decades the Indian public mind is being agitated over the matter. In almost every state gold has ceased to function as the standard and the medium. More than half the world now no longer adheres to the gold standard. That India should demand at this juncture for a standard which is of doubtful efficacy, and thereby hope to solve the World's and her currency evils would sound strange and unnatural. Strange no doubt, but true with all that. Facts are some-

times stranger than fiction, and this is one of those. Gold standard is gone, but not gold values. Things are valued in terms of the abandoned standard, for there is no equal or next best. Prices still retain their significance in terms of gold because gold is the one common momentary medium and the standard in man's minds though not under the currency law.

The statement that gold has failed as a standard cannot be accepted for a fact. Its breakdown is inevitable under the stress of adverse economic currents. With improved economic conditions re-establishment of gold standard is certain, but the time and parity of such a return is a matter of time.

Shortness of supply is according to some at the root of the trouble. Compared with demand for momentary and artistic purposes the supply from natural sources has become too short. The gold discoveries of California and Australia have trebled the World's annual output till by 1852 the new gold unearthed is over £3,00,00,000/-.

But ever since the output from those parts is steadily on the decline. The South African mines are nearing exhaustion. The increase in Canadian output does not make up the falling off. There is an annual increase of 2 to 3% in the volume of World trade on account of the rise in the standard of civilization and the pressure of population. Besides, the decision of primary states to have gold alone in payment of goods sold, the insistence on war-debt payments on a stupendous scale in the metal, and the restrictions put on gold embargo made it scarce and unavailing to the trading public. At two per cent. increase the gold required for monetary purposes by 1940 is estimated to be £244 millions whereas the actual available amount would be £170/-millions only.

The conclusions come to ex-hypothesi on present data and future possibilities may prove false. A mine here or a mine there may show signs of exhaustion; the possibility of the discovery of new mines is always there.

Gold and silver, so far production is concerned, are not like other commodities. The supply from mines in any particular year does not as with wheat or jute depend upon the production in that particular year. The supply may be slow. But the World's output is large and there is a constant addition to the stock every year. There is and can be no consumption of these metals in the sense in which wheat and sugar are consumed with an ever-recurring demand for further use.

The loss from wear and tear is almost negligible. The supply at a particular time depends not on the supply from natural sources (mines) alone, but on the World's stock, and from a variety of sources, as they are put to a variety of uses. It is most unlikely that the World's trade would hereafter remain steady and continuous at the point it has risen to. The onward trend is in the direction of a fall, and not a rise in international trade. There is no mincing or mistaking the protectionist policies, the trade barriers and nationalistic tendencies of the day.

Economies effected in the use of gold for monetary purposes will solve the gold problem to an extent. For small payments token coins may be substituted for bank notes. Credit instruments in the form of cheques can further be exploited to relieve the pressure on actual currency. The reserve ratio may with advantage be reduced from 40 to 30 per cent.

Gold standard is a necessity with us, but not a mere sentiment as some suppose. The economic forces in and out of the land render the need more imperative. With gold and silver functioning in external and internal transactions respectively the country is under a double disability. Whatever affects the supply or demand of either metal affects us. No state feels the strain to the same extent as we do as both the metals are affected; gold by too high an appreciation, silver by too low a depreciation, and we along with them.

India has for ages been the veritable sink for precious metals. During the last few years her import of foreign silver

has nearly doubled itself. Though the appreciated rupee rate is kept in tact by pegging it on to the sterling, the notional value which the popular mind has attached to the metal has fallen. The high exchange rate has kept down the internal commodity prices. To pay the same rent, debt and tax, the farmer needs sell more produce than formerly, for the money he gets is far lower. The burden of foreign obligations has become greater. The course open is to fall on past savings, the gold saved at too great a sacrifice through long ages.

The charge often levelled against the Indians is that they are still given to the habit of hoarding, which is a relic of barbarism. As seen elsewhere the absence of a sound banking system and full facilities of profitable investment are accountable for the habit. The enormous sale of distress gold in recent years is a proof positive that Indians value gold as a means to an end, but not as an end in itself. The charge of "barbarism" has no substance either in view of large private hoards made in France and America in the critical years of early thirties of the century. What to call these? Do they smack less of barbarism because civilised peoples take to it? They are civilized barbarisms of an enlightened age if you will, but barbarisms nevertheless. When there are no good facilities of investment, and people get panicky and lose faith in banks, it cannot be otherwise human nature being the same everywhere.

Again, it is said that being poor, the country cannot afford the luxury of a rich gold standard. Is it not a contradiction in terms, an 'aye' and 'nay' in one breath. If India is a poor country, how can a poor people hoard and expend on jewels? Right knowledge, wise direction, able organization and proper pooling of the scattered resources is what we lack. The appalling poverty notwithstanding the immense resources we have is what surprises the observer. If the rich nations want to get richer or maintain their prosperity by gold standard, we want to rid ourselves of our economic ills and gnawing poverty. To say that we cannot think of gold standard unless we become rich is to argue in a vicious circle.

and is well worthy of the fool in the fable who vows not to venture into water till he becomes an expert swimmer beforehand.

If gold is introduced and payments are being made in gold coin, maintains the critic, silver coins alone remain in circulation driving away the gold ones because of the intense poverty of the people and the smallness of the transactions. There would be no room for fear if the coin introduced is of a low denomination so as to be useful in all big business demands, silver and other coins meeting the bulk of the day-to-day sale and purchase transactions. In support of the contention it is pointed out that when the Government by way of trial between 1900-1902 put the sovereign in circulation, most of them were returned to the treasuries. But the fact that out of the total of 300 crores of currency sovereigns of the value of 60 crores were in circulation mostly in the Punjab and Bengal refutes the charge and falsifies the inference that India is unfit for gold standard, and that the trial allowed ended in failure.

In the economic state of the country a sovereign is high in everyday transactions, but a coin of a lesser denomination may well serve the purpose. As against this, it is urged that gold embodies great value in small bulk, and that a small coin of the size, say, of a four-anna silver piece is inconvenient to handle and liable to miss. In answer we wish to point out that four-anna pieces are in circulation and there is no preference shown to four-anna nickel pieces of a bigger size on this score. To transact the vast volume of her large business England may have the sovereign, which is of a high denominational value. But what of others? America with large commerce, high standard and untold wealth has the dollar for its standard which is about $\frac{1}{4}$ th the value of a sovereign, and that of France was $\frac{1}{60}$ th and in recent times $\frac{1}{120}$ th fraction of the sterling. The Englishman may in derision call the French coin 'the two penny franc' but it serves the purpose quite as well as the sovereign itself, and the country having it as its standard is none the poorer for that. A coin of the value of five rupees may well answer our purpose.

It is sometimes feared that if silver is replaced by gold there would be a general rise in prices. The rich only can secure what they want, while the poor are under a serious handicap. A general rise is what we want and what the world wants too. For the agricultural and industrial development of India it is quite indispensable. It puts some money in the pockets of those that have none at all, and adds a little more to those that now get something, thereby reducing unemployment of every category. Gold standard does not mean replacing silver in toto. The great bulk of internal exchange transactions are to be carried on in token silver and copper.

The costliness of gold currency, argues the critic, is too great a strain on the poor finances of the state. If the cost is by a gradual process distributed over five or six years, the question of expense does not arise at all. If, instead of the rupee, the sovereign or a fraction of it is made unlimited legal tender, and the Indian merchant could make use of the gold coins he came in possession of, India would have been a gold standard country by now without entailing any expense to the state, and without any the least depletion of the gold reserves of the country owing to the enormous trade balance she had during the last decade and a half. The excessive use of Council Bills and the unlimited legal tender quality of the rupee militate against the encouragement and introduction of gold currency. If the Indian exporter is to receive gold instead of Council Bills with an equivalent silver bullion to be minted, the solution of the gold standard would comparatively have been an easy matter.

The point that the currency which is the least expensive is the best, the safest and most convenient does not carry conviction. It over-looks the cardinal fact that paper has no independent existence, that its value and circulation and ultimate convertibility depend upon the reserves kept. The circulation of paper is in proportion to the confidence which the state infuses into the people. Paper valued and payable on demand in terms of gold has a firmer basis,

and stands the chance of greater circulation without depreciation. Paper linked to precious gold has in the popular mind higher value than paper linked to the falling silver.

Gold standard, it is urged, endangers the exchange question. Because of the existence of gold exchange standard during the world crisis of 1908 when India was famine-laid, the issue of sovereigns at 15 rupees a pound staved off the exchange difficulty. But if gold standard is established, and gold is distributed and diffused throughout the vast length and breadth of the country, it would not be possible to readily recall the metal scattered over so as to meet foreign obligations.

The futility of the argument becomes patent in the light of facts. Foreign trade, as the reader knows, is always in India's favour. Our exports far exceed the imports, and the money we get far outweighs the money we pay the foreigner. Even during the critical years of 1930-34 though our exports have considerably dwindled, they are quite in excess of our imports. The argument is built on future possibilities and contingencies that may or may not come about or if at all once in a decade or two. Would it be wiser or safer to deny the benefits of sound, stable currency for fear of something untoward happening at some distant and uncertain date? Moreover, a crisis can better be tided over under a sound banking system, and national adjustment of demand and supply of gold is hard to obtain under artificial conditions.

And yet another string to the bow of the critic. If India were to remodel her currency system on the basis of gold, wherefrom to get the necessary gold? She has no mines worth the name. Purchase of fresh stocks would deplete the world's reserves and would force up gold value, while forcing down silver price. India would have to suffer, and the rest of the world with it. It must in answer be said that though the supply from natural resources is little she can rely on a steady inflow of gold owing to the balance of trade which is always in her favour. Between 1900-1912 gold imports into the country approximate to 150 million pounds.

If coins were minted therewith, she would have enough of circulating gold coins besides a strong gold reserve towards treasury balances and paper currency.

The averment that she is to purchase gold for monetary purposes needs no refutation. She is the proverbial land of riches. Of the World's stock America is to hold 500 million pounds and France 300 millions, while poor India's accumulations are put at 350 millions—a figure higher than that of France and next to America's. During the last decade from 1920-1929, 25 per cent. of the new gold supply has been absorbed by India alone. The two years that followed England's going off the gold standard and intense internal economic distress saw the export of about 150 crores of rupees worth of gold—an amount far in excess of the natural output from the African mines during the period. In a spirit of utter selflessness she has saved England and through her the rest of the economic world. But the continuous flow while depleting her of the precious metal, puts off the day of World currency and gold stabilization.

The absence of profitable avenues of investment made capital shy and retreat on to the persons of shier Indian women and unto the bosom of Mother Earth. A sound, popular banking system inaugurated, a certain per cent. of interest assured, and a guarantee to the gold invested offered as to other kinds of *stridhana* property and a right knowledge of the principles of sound economics diffused, the agricultural and industrial phase of India would undergo a transformation too big for words to tell. Huge quantities of gold would fly back to the world to play a more manly role in the money market. In proportion to gold for ornamental and artistic purposes the gold available for monetary purposes would largely increase.

The recent sale of distress gold under stress of hard economic conditions is but a passing phase. Normal conditions obtaining the tables would turn, and India would take in gold with greater avidity thereby ushering in an element of uncertainty in the stability of gold value by an increased demand.

Difficulties there are, and will always be in its realization, but the object is great and laudable, and well worth striving for, not in the narrow national interests of this country, but in the wider interests of the world at large. The objections raised and the arguments advanced are more fancied than real, and should not either deter or scare us away. If Indian agriculture and industry are to thrive and unemployment to be wiped out, if plenty and prosperity are to reign, if the Federal Reserve is to materialize, if India is to take her rightful place amidst the economically advanced nations, if high prices are to be secured, and if world currency and gold stability are to become a permanent feature, gold standard for India is a remedy, an effective and a sovereign remedy as well.



CHAPTER VII

PUBLIC FINANCE

MAN is a political animal. The desire to possess and retain what he earns exclusively for himself and his kindred necessitates peace and order, protection from enemies and security of person and property. Herein lies the reason for some sort of organized government with every man that has passed into a state of civilization. Organised Government implies administrative machinery, which involves expenditure

The maintenance of justice is an obvious duty of the state. Without favour or fear it should do justice between man and man, and ensure the reign of law. The judicial machinery, which this involves, is to be maintained at a heavy expense.

Amongst the legitimate duties of the state, education has from the 19th century onwards come to occupy a foremost place. The United States of America expends $\frac{1}{4}$ th of its revenues on education, while military expenditure receives or rather received $\frac{1}{20}$ th part. The annual expenditure of England on national education is approximately £ 8,30,00,000 a year, of which 50 per cent. of the cost is met by local rates.

The changed conditions of industry have placed muscle at a discount, while mental agility and technical knowledge are at a premium. Unskilled labour is badly paid, and is rapidly becoming obsolete. Vocational training is a vital need. The way education enhances the productive power of labour no less than the different action it has on vice and crime justify the enormous capital outlay on education. Education is, therefore, a national necessity like that of maintaining order, and must be undertaken by the state itself. But to be effective it must be adapted to the needs and resources of each district and province comprising a vast variety of subjects that physically, mentally, morally and materially improve the recipient.

Commercial jealousies, national rivalries and the low state of morality at home are responsible for the maintenance of large standing armies at an enormous expense. The withdrawal of able-bodied men from industrial and agricultural employment entails a heavy loss to the industries concerned.

Optional functions do not admit of being accurately defined. Their sphere is wide, vague and unspecified. The hold that humanitarian and Christian socialistic views have come to possess on men's minds do largely account for the inauguration of hospitals, social insurance, supervision of industrial works, loans and grants to Municipal bodies, which are a marked feature of modern national life. The state as the custodian of the public conscience and the collective will of society cannot allow the indigent, the helpless, the orphaned, the infirm and the diseased to perish from want and care. Whereas private charity is indiscriminate, insufficient and unsystematic state regulation secures system, sufficiency and economy.

Roads, bridges, railways, telegraphs, post offices, harbours, light-houses, irrigation works etc., are works of utility meant for public good. When there is not enough of private capital and enterprise, public works are to be undertaken by the state alone. Services that cater to public convenience such as registration of births, marriages, deaths, transfer of property by gift, sale or mortgage, the collection of statistics of population, trade, industry and agriculture, the control of currency and coinage, the fixing of standard weights and measures can best be undertaken by the state to secure greater precision, uniformity and benefit. Left to individual action, these would not have been performed or with less efficiency, if at all.

The state should make a sparing use of its powers. It should not stifle private enterprise and initiative, and not undertake any work unless it is certain of the benefit to the nation as a whole. The right to observe and criticise how the state undertakings operate, and with what financial effects should be open to the public.

Principles of Taxation

The items of expenditure with a wide range and vast variety involve enormous amount of money. How to secure money, and in conformity to what principles is the point at issue. Taxation is the one way. It is the slow evolution of ages and relative to the conditions of a country, its resources, the state and importance of agricultural and industrial life, the character of the people, the stage of moral and political progress. The prevailing ideas and ideals—social, economic and political—mould the forms of taxation that a country has. The kind of taxation will in its turn influence and act on the social and economic life. So a system that suits best with one country may not suit another with different social and economic development. This is not to say that principles differ, but the circumstances of their application do.

A well-planned system of taxation should fulfil certain fundamental tests. Adam Smith lays down four principles—equality, certainty, convenience and economy. The first embodies the principle of justice; the other three secure productivity, and avoid needless cost. The levy of income-tax on the continent by taking into account the different conditions of incidence so as to do justice and equity to all has resulted in more elaborate expensive machinery than under the British system. A single tax is incapable of achieving the object of the principles. The object can best be realised by a multiple system of taxation.

But the payer must know beforehand the time, and manner of payment, and the amount to be paid. It is only then that persons carrying on a business or that want to take to a new one can calculate the likely liabilities and future profits. Taxation in other words should not be uncertain and arbitrary. Injudicious levy often leads to artificial monopolies in trade to the detriment of the consumer. Protective tariffs are incentive while prohibitive duties will create monopolies within certain groups and areas.

The imposition must be convenient. It is to be at a time and place when people can easily and ungrudgingly pay.

Duties on commodities at the time of sale and purchase, fees on transfers at execution, and legacies at the time of death, and land revenue during harvest season satisfy the canon of convenience.

Productiveness is the capital fact in taxation. In the matter of collection there should be no waste, no loss of time and no annoyance to the payer. If a tax bears hard on the payer, it leads to smuggling and evasion. If in proportion to the cost to the consumer import duties fetch a small income, they offend against the canon of economy.

Taxation should not be arbitrary, capricious or injudicious. The capacity to bear and the willingness to pay are the criterion. The word 'capacity' is a relative term. It differs in different countries with different classes under different conditions. The English and the French, who are far richer, are much better able to bear a heavier taxation than the Indians. The propertied or commercial interests can better bear the burden than agricultural and labouring interests that make a precarious living. Besides, heaviness does not count during prosperous years, while it bears hard in depressed times when income is low.

The 'willingness' to pay depends on the growth of the correlative rights and duties of a citizen. 'No taxation without representation' is a maxim well worth remembering. That the payment of a tax should entitle the payer, the person affected, to a voice in its imposition conforms to the principle of justice. Ability being the test there should be no exemptions. No person or class should be allowed to plead privilege.

The Justification

It is said that taxes are the equivalent paid by people for the benefits individually derived from the state. The assumption in the first place overlooks the fact that services of state are incapable of exact money measurement. They cannot be individually apportioned to the members composing a state. If it is averred that the state offers security

of life and property in exchange for taxes, the rich are not so much in need of state help and protection as the poor. The rich as a matter of fact contribute much the larger portion of the State Revenues, and the return of services is not in proportion to or commensurate with the money they pay. If return is taken as the test, the position is to be altered, the rich paying less and the poor more in accordance with the help they seek. The position is in effect a violation of 'justice, equity and good conscience'. The willingness to pay is implied in and follows from the incidence as a matter of course. Rightly viewed it is in opposition to fierce competition and a negation of the principle of each to each, but a sort of joint family broad-based wherein the intelligent earning member is to make moderate provision for his poor, helpless countrymen in the shape of taxes and the state has the power of the manager (*Karta*) to collect, control and expend in the best possible manner for the good of all.

What should be the basis, the test and criterion of taxation? On what should it fall—land, labour or capital? Advocates of a single tax say that land yields a surplus. They miss the fact that there are marginal farms and no rent lands, and that a part of agricultural produce does not repay the cost of cultivation. Besides, the reader knows by now, that 'rent is not peculiar to land alone'. 'Rent element' exists in wages and profits as well. Again, if land is made the sole basis, it does not yield sufficient revenue for modern state requirements. It is a negation of productivity, moreover, the collection of the whole revenue in the shape of a single tax is hard. The very attempt is liable to abuse and evasion, and hits hard the poorer sections of the community. It is not a revenue system, but a socialistic plan for land nationalization through the appropriation of rent. These apart, under the complex conditions of modern societies incomes are derived from a variety of sources. Industry and commerce today fetch in large incomes. That these should escape liability while land is to bear the whole weight is neither just nor equitable. A single income-tax is inadequate, inelastic

and unadaptable to a change of circumstances. A composite system of taxation on the other hand reaches all classes and interests.

There is a proposal to confine taxation to 'realized wealth'. It is self-destructive. It checks production, punishes the prudent, and allows the extravagant to escape with impunity.

Consumption, argue some, is a better test of ability to pay and should be the basis of taxation. People that are able to consume, they say, must be in a position to pay a fee for it. The word presents some difficulty. Should wealth necessary for the promotion of an industry be included in the meaning of the word? If that is the case, unutilized wealth escapes taxation. Attempts at evasion become more widespread, and a costly machinery must be set agoing to fight it and collect the revenue. Luxuries will be consumed less with a consequent fall in their production and sale. The duty would bear heavily on necessities as there could be no reasonable reduction of these, and people that spend their entire earnings for subsistence must pay to the extent of their income. The dead weight of the burden falls most on the least able in contravention of the canons of justice and equity. The standard of living of the great bulk of population is adversely affected not without its reaction on their general purchasing power, national prosperity, and internal and external trade.

A duty should not be heavy either lest it should defeat the very object of its imposition. It is a check on saving and accumulation of capital. It bears hard on the thrifty and the industrious, leads to false income returns, encourages smuggling, and sharpens human ingenuity to effect economies to make use of inferior stuffs, utilize waste and cheapen cost of production or find out a new substitute. If the article consumed is a necessary of life with no cheaper substitute, it brings in a rise in prices. The increased cost reduces the general purchasing power of the consumer with the result that there would be less of demand for other arti-

cles than formerly. The diminished demand would adversely affect the producer.

Mill, Recards and others have held that 'subsistence income' should be exempt from taxation for the simple reason that one should live before he can pay. A tax, say they, on wages forces down the living of the labourer below a decent standard, impairs his efficiency, and acts on the nature of his work. The tax would ultimately shift itself on to the employer or the community as there can be no reduction in the case of a minimum wage. In trades where free competition prevails part of the tax is thrown on the community. The more an employment partakes of the nature of a monopoly, the greater the rent factor, and the higher the capacity to pay. In the case of skilled labour the tax moves with lesser ease until at the point where it gains monopoly value the incidence wholly falls on labour.

As a means of working out equities progressive income-tax increasing with the amount assessed is suggested. Even graduated scale is bound to be arbitrary. It is not easy to interpret equity to different persons under different circumstances. Sacrifice is not equal in every case. Before it can be gauged special circumstances such as the size of a family, the standard of comfort, the social status of different persons are to be taken into consideration. A person getting Rs. 100/- a month is not, other things being equal, in a position to bear a tax, while another that gets Rs. 200/- may be in a position but not to the same degree as one that gets Rs. 1000/- a month. There should be a lower limit below which incomes should be exempted so as to ensure a decent living whereas income that exceeds it may be taxed but by progression.

But all incomes are not on a par. Salaries, for instance, stand on a different footing from investment. Unlike the recipient of income from investments the salaried man is under the necessity of providing for the gradual loss of his earning power by building a fund against sickness, old age, and for the family during and after his death. For this reason

his capacity to pay is less than that of a person with the same income from capital investment.

In the case of commodities progressive tax is costly, unproductive and unsatisfactory. Its results are more mischievous when applied to large industries. It counteracts the Law of Increasing Returns, saps the springs of thrift and industry, drives capital and labour into unprofitable channels, and checks steady economic progress. It falls heavily on a few, and is an infringement of the canon of equity. Nor can it be relied upon as yielding a permanent and adequate revenue. 'A good system of taxation is one that bears lightly on an infinite number of points, heavily on none.'

Direct Taxes

Taxes are classed under two distinct heads: direct and indirect. Applied to taxes the terms have reference to ultimate incidence or burden. 'Direct taxes' are paid and borne by the person on whom they are levied. 'Indirect taxes' are duties on goods or taxes on services and actions paid by some and borne by those that make use of the articles taxed. Duties on inheritance, on legacies and successions, the stamp duty, the registration and the court fees, the tax on land, and licences for carriages, guns, servants, dogs etc., fall under the first head. In England legacies and successions are liable to a duty varying from one to ten per cent. according to the degree of nearness of the inheritor to the deceased—children paying one per cent. brothers and sisters three, others five to six while strangers in blood ten.

It is popular with the masses as falling on propertied classes. Capitalistic production being in its infancy, and there being no great accumulations to break, inheritance duties are unknown in our country. The Indian Succession Act requires two per cent. on the amount or value of any debt or security specified in the certificate under Section 8 of the Act for the grant of a succession certificate, and three per cent. on the amount or value of any debt or security to which the certificate is extended under Section 10 of the said Act. The

duty chargeable on deeds, bonds and conveyances is laid down by the Stamp Act. The Indian Registration Act has drawn a table of fees payable on documents presented for registration. The Court Fees Act enjoins the fees leviable on causes, petitions and appeals. The fee is collected in stamps and the amount determined by rules of High Court under Section 15 of the Letters Patent and Section 107 of the Government of India Act.

The amount secured depends on factors such as the general prosperity, the business talents and the litigious nature of a people. Add to these, it is well worth nothing that taxation is like land subject to the Law of Diminishing Returns. The scale of fees cannot indefinitely be increased without affecting the total amount collected. The increase of Court Fees from 7½ to 11½ per cent far from swelling the revenues has in many provinces resulted in a perceptible fall on the aggregate revenue.

Land Revenue

Land has been the most ancient source of revenue. The royal demesne of feudal days along with other customary dues maintained the King in comfort and met the expenses of State. In India land is the historic source of revenue. The Hindu sovereigns were entitled to a certain share in the produce of the soil. Even now land is the most productive source of public revenue being as large as all the other sources put together. In a country mainly agricultural it is the one certain tax that reaches the bulk of the population.

Is land revenue a tax or rent? It is a disputed point not free from doubt. It is argued by one school of economists that Hindu and Moghul sovereigns were full owners of land, and the British Government as the inheritor is entitled to the right, interest and title. The Indian School maintains that it is a tax like any other. The contention that the state has like the landlord carried on works of public utility such as roads, railways, irrigation schemes in the interests of tenant has no substance either. Works as these are part of the functions

that now fall within the sphere of civilized state action. The absence of personal interest under state ownership leads to the impoverishment of the soil and a fall in revenue.

Certain and productive though it be, land revenue is inelastic. It does not increase with prosperity and diminish with depression as excises and customs do. It is said to be a gain in that it makes the payee aware of his liability and take an active part in the administration of the state. But to make the payer painfully aware of the burden cast on him is to say the least imprudent. The state is to see that the actual incidence should as far as possible be little known so as to avoid discontent and resistance.

Permanent Settlement

In the early years of its rule the India Government fearing the cost and the difficulties of collection made extensive grants of permanently settled estates on condition of payment of a fixed annual land revenue. The whole of Bengal and parts of Madras are permanently settled, while other parts of the country are subject to periodical settlements. Lord Cornwallis, the sponsor of the measure, believed that it would be a double blessing both to the Government and the land owning interests. With full rights in the soil and with none to share the benefits of land improvement, it was expected that the measure would usher in a new era of plenty and prosperity while it would assure to the Government a fixed annual revenue without the necessity of maintaining a costly survey, settlement and revenue departments to measure and classify lands, to fix the rate and collect the revenue.

Under the *ryotwari* system the position of the Government is akin to that of the landlord with similar rights and liabilities. The drawbacks of state-ownership are there, and the costs of survey and settlement proceedings are great.

Settlement for a fairly long period extending over a period of 50 years is a compromise between the permanent and the *ryotwari* systems. It ensures to the state a fair share of the unearned income by periodical enhancement of $\frac{1}{4}$ th

in the rupee when permanent improvements are effected at state expense or when there is a rise in the price of staple food crops, while the occupant of the land, the actual tiller of the soil is sure of, and has sufficient time to profit by the improvements made. The tax being on unearned income, does not hit or hinder the development of the industry.

Indirect Taxes

An indirect tax is collected at a most opportune time when people have money and are on the point of spending it. The amount is small and does not bear heavily on any. The incidence is obscure and the actual payer does not generally know that he is paying at all. It is elastic in nature with an easy adjustment to a change of circumstances. It rises during a period of prosperity when consumption is on the increase, and falls in times of depression when demand contracts. It is secure in that it can be raised in a period of war or to meet a contingency with little opposition and without any the least fear of detection. By a judicious selection of commodities it can be made to touch all interests and classes. With the growth of trade and industry in modern times indirect taxation has considerably gained in importance and volume. Much is collected, and from a variety of sources.

The tax may be on necessities, and luxuries as well. Necessaries are as a rule exempt from taxation as the tax diminishes consumption of prime necessities. But if the rule is strictly adhered to, it is not possible to reach all classes in a country like India where about $\frac{3}{4}$ th of the people do not make use of luxuries. Hence the tax on salt, a prime necessary of life. Taxation is sought to be defended on the ground that it brings a people into closer touch with the governing body, and there should therefore be no privilege in favour of any class or community. Political activity and public life presuppose the possession of enough to eat and spare, of much leisure and proper political education. A tax does not of itself increase the number of those that take an intelligent

interest in politics, more so when it is indirect. Not one in a thousand does really know that he is being taxed. A moderate and reasonable levy fulfils the conditions without being a hardship on any.

Exports and imports are subject to a duty at the time they leave and enter a country known as export and import duties respectively, while articles internally manufactured bring in what are called excise duties. Duties may, according to the object with which they are levied, be divided into three classes : productive, protective and prohibitive—productive when they are revenue-yielding, protective when intended to foster an indigenous industry, and prohibitive when the object is to check or choke and kill a dangerous or harmful trade.

It is a contradiction in terms to say that a duty is both productive and protective at the same time. In so far it is the one, it ceases to be the other to that extent. The difference, however, is one of degree, not of kind. Productivity is the first stage, protection marks the second, and prohibition comes in last.

Productive Duties

Exports

Revenue being the main motive of taxation the duty is so fixed as to yield maximum income. India having a natural monopoly in the production of jute and tea, the export duty really falls on the foreign consumer. The Indian producer is not affected so long as the foreigner is not driven by the heaviness of the imposition to seek cheaper substitutes. Export duties on the necessities of life such as wheat and paddy ensure greater consumption in the land, while those on raw materials necessary for manufactures at home such as hides and skins go a long way to rehabilitate the most ancient and important industries of the country besides yielding a certain amount.

Imports

Import or custom duties are an ancient form of taxation. The assumption is that the trader paying the

duty recovers it by the sale of merchandise. The duty falls on the country imposing it unless the country that imports the article is the sole market in which case the duty is borne by the foreigner. Productivity and convenience require that the duty should be on a few different kinds of articles of general consumption, necessities and luxuries as well. Duties on necessities such as food stuffs, piece-goods, metals, chemicals and luxuries like sugar, cars, oils, soaps and fancy articles fetch a decent income. In one case the incidence falls on all alike, while in the other it falls on the rich that make use of the luxuries.

Protective Duties

The development of indigenous industries depends on the kind and degree of protection offered. Productive duties are a step in advance on free competition, and offer a degree of protection though partial and insufficient, for the growth of native industries. With an increase in the scale of imposition duties enter the stage of protection, and by the time protection becomes complete they cease to be productive. Beyond a certain point an increase of tax is attended by a fall in revenue on account of the operation of Law of Diminishing Returns. Though the duty on a particular denomination be higher, the income on the aggregate is far less, the heaviness of duty acting adversely on the capacity to consume.

Protective taxation is advocated on three grounds: to develop native industries, to give preference to colonial products, and to compel foreign powers to reduce their tariffs on the goods of the exporting country by retaliation. The first as we have seen, has become the cry of people and the slogan of nations—the way for national self-sufficiency and the solution for wide-spread unemployment. India's case for protection is far stronger than that of any other state because her suffering is greater, and her problem of unemployment keener. That a country avowedly protectionist should have to raise about ½th

of its revenue by import duties on goods, which it is its object to exclude is an obvious anomaly. The second insists on economic unity within the British Empire with preferential rights of trade amongst all the component states. The Ottawa Agreement is the move in this direction. Thirdly retaliation is a weapon, effective of course, but double edged and capable of hitting both the parties, the state striking and the state struck at. If the Allies refused to trade with Germany which had commercial connection with every state, to that extent their trade suffered.

Tariff walls bring the question of deficit revenue to the fore. What new avenues to look to, and how to fill the gap? With the increase of protective tariffs and the passing of the Safeguarding of the Indian Industries Act the fall in revenue on sugar imports alone comes to about 10 crores of rupees. The imposition of excise duties on infant industries just feeling the way, and not sure of a steady step is to nullify the beneficial effects of the Act. On account of the complete disappearance of inland industries excise duties are more or less confined to manufacture and sale of opium and country liquors. With a respite extending over a decade and a half old industries that are and yet to be will after the period be in a position to contribute their share towards the state revenue. As to deficit budgets and growing expenditure their solution is by way of more drastic and effective methods of a permanent character.

Prohibitive Duties

To put down extravagance and luxury, and to regulate consumption states often have recourse to these duties. Prohibitive duties are more in advance in the case of liquors and intoxicants that have a most injurious effect on the human system. Total abstainers plead for total prohibition by too high a duty so as to make liquors unavailing except for medicinal purposes and wipe out the habit altogether by slow degrees.

But drink fetches large revenues in most of the modern states. The income is certain and needs no costly machinery to collect it. In India the net revenue, for it is all net, totals about 18 crores. If, as the abstainer pleads, the duty is raised to such a degree as to make the country dry, the loss of revenue is enormous.

The answer is clear and convincing. Wine is the prime mover of human crime. The moneys spent on Police and Criminal Departments to prevent, mitigate and detect crime, to prosecute and punish culprits, to vindicate justice and maintain law and order far exceed the revenue derived on this score.

Anomalous Taxes

There are some taxes, which, strictly speaking, cannot be termed either direct or indirect. They are an admixture and a mingling of both. The income-tax is from a variety of sources: houses, interest, salaries, business-earnings, railway freights and investments on tea, tobacco and forest plantations. In all these cases the incidence cannot be said to fall on the person paying the tax. When the owner himself is the occupant of a house, the tax falls on him. When it is leased out, the burden is in part shared by or wholly shifted to the tenant. In assessing income-tax capitalized house value is being taken into consideration. Tax on interest and salaries is a direct incidence. The assessment of business earnings is not borne by the payer alone. In the case of luxuries the burden is shared, but in the case of necessities it is thrown on the consumer. The railway duty falls on communication and transport. It is not correct to say that the charge falls on the railway company that holds the transit monopoly. In the case of fares, the duty falls on the passenger and in the case of goods, the trader and the consumer bear it. A tax on transport checks business, raises prices, reduces consumption, assists dumping, and diverts trade into cheaper competing routes. Forests are an important source of revenue. Under state action and regulation forest produce

can be enhanced more than when it is left to the wild caprices of Nature. When money is invested on tea and tobacco plantations or the working of mines, it is not possible to place the duty under a direct or indirect tax or fix the source whence it emanates, land, labour or capital, for it is the result of the three factors, and ascertain on what it falls, rent, wages or profits.

Taxation diminishes individual production and consumption. If the tax is levied at any stage of production, it absorbs capital with future interest thereon, restricts business to a few capitalists, and creates monopolies besides increasing the cost of the consumer. It is a deduction against the purchasing power of the community, and makes it poorer to that extent. If the methods are just and economic, and the objects beneficial, it is a good investment that 'returns interest to the community'.

The very idea of a new imposition is unpopular and raises opposition from those likely to be affected. Collection is not easy, and costs involved are large. If taxes are modified and restricted to a limited number of articles especially luxuries, and confined to finished articles, there would not be much to say against indirect taxation. But objections there are and will always be for any system of taxation, however good or idealistic it may be. The least objectionable is to be commended. A well-balanced system that combines direct and indirect taxation, that bears lightly on a large number of persons of different classes, but heavily on none, that causes the least disturbance to any trade or industry, and secures sufficient revenue answers the purpose and satisfies the principles.

A Judicious Apportionment

Social, political and economic ideas and ideals dictate the extent, the manner and the method of expenditure. Law and order, security of person and property, and protection from internal and external enemies absorb quite a lot. Prudence requires that the state no less than the individual should regulate

expenditure so as to keep it within the limits that income sets, 'cut the coat according to cloth' embodies a sound economic truth. Individuals and nations come to woe either because they fail to realize the truth of the saying or lack the will to act to it.

The strength and stability of a state lies in the soundness of its finance. If financially weak, no state counts, wields any power, or commands any respect. Money is position and power. It decides wars and determines the fate of nations. The richest state is the most powerful. America's decision to throw in her lot with the Allies turned the tide of war, and sealed the fate of Germany.

The Budgetary Position

Budget balancing is become a feat. In the case of creditor countries, and those that have their resources worked out a mere balancing is all that need be aimed at. Old states like England and France do not offer a model to young countries. Heavily indebted, with vast resources still unworked, and with big costly plans for future economic regeneration a surplus and a large surplus is a dire necessity with us. A person well advanced in life that drank life to drugs, that gave a decent start to his sons, and made ample provision for himself and his dependents need not worry himself to lay by as one, who is still young with a numerous family to maintain, with daughters and sons to marry, educate and provide for.

To meet expenditure three courses are open: additional taxation, readjustment and retrenchment. Fresh taxation is unpopular, and cannot be increased without hitting the community. Money well adjusted and well spent secures the maximum benefit with the minimum expense while retrenchment by a nibbling of salaries and by drastic cuts in the heavy civil and military budgets secures a surplus wherewith to repay the crushing national debt, and to replenish the starving industries of the country.

Readjustment

About 20 crores of the revenue is being annually spent on the opening of new railway lines and for the upkeep of existing ones and irrigation does not receive more than $\frac{1}{4}$ th of it. Much the larger part of the revenue may better be utilized for constructing canals that serve a double purpose, as a cheaper means of water communication, and as an unfailing source of irrigation.

Education is not in consonance with social and economic needs. It does not help to improve individual efficiency or agricultural and industrial output. Far from making the pupil an intelligent helpmate to the family in after life it inculcates in him an utter disregard for the profession of his father's, and fills him with self-conceit and false notions of dignity. If education is to be of material value, the present system ought to be recast and remodelled. Useful knowledge and culture are to be diffused on practical problems of life. About 5 per cent. of the revenue is being spent on education. The Indian educationist looks to the salvation of the country through the increase of education, but the funds forthcoming are not sufficient.

Retrenchment

India has a most topheavy administration with no parallel anywhere. Police, executive, judicial and other departments consume a large part of the state revenues. Salaries are exorbitant and out of tune with the economic state of the people. Salaries both of imperial and provincial service are guaranteed from out of the revenues of the country.

The reason set forth in defence of high salaries is that they confer a dignity and respect on the official and make him not amenable to mal-practices. Dignity and respect do not depend on the pay a person gets, but on real worth, on sterling mental and moral qualities. As to the last, it cannot be accepted as a proposition that all highly paid officers

are above the taint and that the low paid officers are as a rule corrupt. It all depends on the character, education and training of the person concerned. It is perhaps an adjunct of modern civilization. The highly civilized states are most prone to it, and America, the wealthiest and the most civilized state tops the list. High salaries in one way effect real efficiency, the scramble for jobs being keen. In the struggle, the really fit may be worsted. Let not the maximum salary exceed Rs. 1,000/- and the minimum be lower than Rs. 50/- so as to ensure a decent life. There would then be less of unhealthy competition, less of the craze for the crumps of office between the European and the Indian, the Hindu and the Moslem, the Brahmin and the non-Brahmin on grounds of colour, caste or community. Merit asserts itself, efficiency comes to the fore, and best brains with a spirit of sacrifice and service come to fill a place ably and nobly in the State.

Military Expenditure

Wars are a drag and a serious set-back on the progress of a people. The defects in human nature are in large part responsible for the woeful waste on wars. Science has extended its bounds and intensified its horrors. It has transgressed the limit of jurisdiction hitherto set, and extended from land to water, and water to air. The diabolical researches, and the ghastly advances made from day to day in the destructive apparatus such as the gas and the bomb, and the moving forts underneath the earth to blow and arrest the advance of the foe involve amounts past easy calculation.

The annual army expenditure in India has from the pre-war figure of 20 crores risen to about 60 crores absorbing half the land revenue. Absolutely and in relation to the revenues of the country, the cost is preponderantly large. Notwithstanding the extreme poverty of the people, the burden is far heavier than in Australia or Great Britain.

The Indian army consists of the covering troops, the Field Army and Internal Security Troops. Though differentiated they are used for quelling internal rebellions,

and fighting frontier or empire wars whenever necessary. Of the total strength of 2,40,000 1,80,000 are Indians and 60,000 British.

India is the training ground for active service. British boys between 17 and 24 are trained for a period of 7 years at India's expense at £ 25 per capita, and $\frac{1}{7}$ th the number is being renewed every year. The training over, they are discharged with the option either to join the army in India, seek service in the Police, Civil and other Departments or go home as they like.

Besides, the Medical service is a heavy drag. It consists of two departments: one to look after the British Soldiers, and the other after the Indian Army. 25 per cent. of the troops are normally subject to illness during the year. The Medical staff is double the number of soldiers. Hospitals are many, and the money spent is large. Add to this, a British Soldier in the employ costs five times as much as an Indian Sepoy.

The existence of the army is said to be in the nature of an insurance for internal and external security. But the premiums paid are in excess of the paying capacity of the people. It cannot be termed Indian either, though money is Indian and men for the most part are Indian. It is a sort of mercenary force that can at any time be withdrawn from the country. It cannot be said to be either imperial or not imperial, in one sense it is, in another it is not—imperial in that it is manned and used for imperial purposes as well, and not imperial in that the British Exchequer does not contribute anything towards its upkeep. Its strength and efficiency are being determined by the needs of the Empire as well.

The justness of India's claim to contribution is being admitted. The Capitation Charges Tribunal has recommended the grant of a million and a half pounds from the Imperial Exchequer to the Government of India. The Simon Commission reports that a portion of the capitation charges is to be borne by Great Britain. The Federal Structure Committee has likewise held.

The plan does not however fall in with the view of Indian statesmen, who want that the entire defence should be in Indian hands. The memorandum which the late Sir Sankaram Nair and his colleagues of the Central Committee on Indian Reforms have submitted, makes it clear that India's internal and frontier defence has been effectively provided for without the use of the British Army troops. The fact that the Empire, has had need for the Indian troops several times makes it plain that India has no need for the British troops. But because of her central position, she is a convenient base for their transport in case of an emergency in the Empire. For Empire defence England annually incurs a lot of expense, and India too with her, but the Dominions do not bear a pie of it.

The army expenditure is defended on the ground that it is not without 'nation building value'. The Indian soldier, affirm the upholders of the view, is better clothed, better housed and better educated than he would be in his own village. He leaves the army a better citizen, and promotes a 'higher standard of physique and living. What does it matter to the hundreds of millions outside? His pay, and pension, and the standard are at their expense, and to that extent they are poorer. When they lack the means, does knowledge which the soldier brings, make them any the better or happier for that?

The King George's Schools provided for the sons of Indian Soldiers offer a model for others run by Local Governments or non-official bodies where a large proportion of the boys never rose above the first Standard, and on the average each school produced less than two literate boys per year. It is because of poor attendance due to the economic helplessness of the people, the paucity of public funds, the defective system of education and the low type of inefficient instruction.

The Army Medical Service more than repays the investment with its valuable contribution to the medical world especially in the matter of acute infection type of diseases

to which the otherwise healthy military male population is prone. The discoveries in the sphere of malaria, the evolution of vaccine, and the idea of mass inoculation against typhoid fever are worthy of note as being military in origin. Moreover, the Grass and the Dairy Farms that ensure an adequate supply of fodder for army animals and dairy products for military population have a wider public utility. But for the researches made under the auspices of military authorities the horse and the mule industry in India would have long ago become extinct. The experiments made with imported breeds of cattle, and their crossing with Indian stocks is of no small importance to the breeding of cattle. These are no doubt well in their way, and to the extent they go. But it is an expensive round-about way, and the extent is small and limited. A greater unexplored field can most profitably be covered in a shorter while with greater intensity if a portion of the revenue is set apart for agricultural and industrial research, and if the brains and energies of the people are directed through proper channels.

The existence of a vast European army at an enormous expense is said to be due to the distrust of Indian regiments, the Indian peoples and Native princes. The heroic way in which the Sikh and Gurkha regiments fought the Germans in front ranks during the Great War has evoked the admiration of the foe, not to speak of the Allies and other powers. The love and loyalty, with which the prince and the peasant have responded to the call of England and poured forth men and money in hundreds of thousands, are still too fresh to need recounting and point the other way.

A reduction in expenditure can be secured in either of two ways : by reducing the number and file of the existing army, or by steady Indianization keeping the figure but lowering the expenditure.

Facilities for training and service and direct recruitment for officers' post is to be open to young energetic men. Youths from our villages are to be given training so as to befit

them for active service on the field in times of war, while in times of peace they are to function as a sort of village police force to prevent, suppress and detect crime as the case may be. India is not lacking in military talent or material. Every province or every village for the matter of that has in it communities that abound in valour and prowess, which, for want of opportunities, are withering away.

The object of British rule in India is to educate and train the Indians in the methods of Self-Government. We want and value Self-Government, Dominion Status, responsible government or whatever it be, as a means to further the material prosperity of the people. Self-Government and military helplessness ill go together. There can be no real Self-Government without military power. The one is a mockery without the other. Military power is the protector of prosperity, which Self-Government helps to create.

National Debt

Public debt is the liability incurred by a Government on behalf of its people and for a public purpose. It is a deadly creation of the age. Far from being regarded as such it is looked upon as a mark of progress and civilization. Banking, public credit and public debt are parallel developments inter-related and inter-dependent, one aiding and leading to the other. Debt is a curse and a crime in the case of a nation no less than in the case of a person—a curse in that it throttles down material progress of the present generation, and a crime in respect of the future one in that it shifts on to it the dead-weight of a debt in the contraction or spending of which it has neither part nor lot.

As individual income is to regulate the scale of individual consumption, so should state revenue be the guiding criterion in the matter of expenditure. If for any reason expenditure outruns income, the deficit is to be met either by new taxes or an over-issue of notes, a sale of Government bonds and securities or by a wholesale borrowing. States do generally have resources to all these.

Additional taxation is not popular, and leads to discontent. The power of note issue cannot indefinitely and indiscriminately be made use of. Paper money, as we know, has no independent existence. Its ultimate convertibility depends on the reserves kept. If for every fresh issue a corresponding metallic reserve is added as sound banking requires, the Government is no gainer and the purpose is defeated. If no reserves are added, paper money becomes inconvertible. Depreciation follows every fresh issue, and works at quicker pace in its last stages. Taxes would be paid in depreciated paper. Government must withdraw its paper at its face value, and incur a loss or be prepared to have a severe blow inflicted on its credit and future borrowing power. For a temporary advantage industrial, social and financial risks are to be incurred. Voluntary loans, war bonds and guild-edged securities floated with the promise of regular payment of annual interest, but the repayment of principal deferred to a long period do not however secure the colossal amounts needed.

National debt is largely the product of war. In comparison with the money spent on armaments, the money set apart for productive concerns pales into nothing. The advance of destructive science has immensely added to the debt-burden. Under its lead nations are literally breaking their backs. With the exception of France and America no other nation, not excepting even Great Britain, is debt-free. While her European debtors repudiated payment, England to maintain her credit felt bound to make payment of war-debt instalments to America as and when they fell due. Germany defaulted. Russia and Poland likewise. The Hoover Mortarium gave a breathing space to the gasping nations, but full recovery it could not guarantee, and nations today are arming themselves to the teeth, at what cost to each and to the world it is too early to say, hoping however against hope that the best guarantee for peace lies in arming to the full.

At the time the crown took the administration from the East India Company India's National Debt was about

112 crores and now it has come to about 1100 crores. The Burmese Wars, and the military operations in Egypt, and other parts of the Empire cost about 35 crores. India's contribution towards the expenditure of the Great War amounted to about (£ 146·2 millions) 219 crores by the end of 1920. The Special War Services upto the end of 1922 involved about 85 crores more*. The war loans raised between 1914 and 1919 were in most cases short term loans which were converted or repaid by fresh borrowing in subsequent years either in India or England.

The internal rupee debt is nearly one and a half times the sterling debt. Of the total the sterling debt is 440 crores while the internal rupee debt comes to 660 crores of rupees. At 4 per cent the annual interest payable comes to $17\frac{2}{3}$ and $26\frac{2}{3}$ crores respectively. The average debt per head is about (1100/35) 32 rupees while interest per head comes to about (44/35) $1\frac{1}{2}$ rupees.

The burden is relative to the income. The average annual income of an Indian is as we know put at 74 rupees. The greater the annual average income, the higher the power to pay and the lighter the burden. Compared with similar figures outside the burden is far heavier.

Interest on moneys borrowed at home is met from out of the central revenues, while interest on foreign capital and other commitments, which in round figures total about 100 crores, are being paid out of the surplus of export trade. But during the recent abnormal years India has not been able to pay, there being little surplus on account of the unprecedented shrinkage in her exports, and she has to make fresh borrowings for the purpose. The rate of interest has risen from 6 to 8 per cent.—the reason assigned being the expression of opinion by some to repudiate debts. The real reason is that India is a systematic borrower, and of late a defaulter in the regular payment of interest, not to speak of the repayment of the principal. Add to this, the supply of

*Figures from the Official Publication 'India's Contribution to the Great War' pages 160-161.

money is not in keeping with the enormity of the demand being confined to Great Britain alone. The fear expressed by some is that if matters are not improved India like Germany may in future be driven, though much against her will and sentiment, to default.

But the hope is there. For centuries together India has been a most valuable asset to Great Britain from a political point of view. In weal and woe she has been a true friend and a partner. In her financial distress India has a moral and equitable claim on England. It is not too much to expect of her to extend in a liberal spirit the help she needs, and do something substantial as she has done in the case of Ireland by releasing her of a part of the national debt of the United Kingdom. From what she has done in the case of the capitulation charges her goodwill and generous gesture are patent.

Remedies

For clearing debt two courses are open: economies effected in the costs of administration, and increase in the general prosperity and the tax-paying capacity of the people. A wise and careful curtailment and spruning of costs, and a reduction in army expenditure to a third of what it is at present will go a long way to this end. As sinking fund for reduction or avoidance of debt a sum of seven crores is annually provided for in the Government of India budget. Out of the 40 crores to be saved half may go to pay interest, and at the first instance towards partial repayment of loans used for unproductive purposes. The remaining 20 crores may be utilized for rural uplift, and for agricultural and industrial improvement, and research adopted to provincial needs and conditions. The increased prosperity consequent on such a policy brings in larger incomes with greater certainty, with less trouble, and without the least necessity of allowing annual remissions or imposing excises on infant industries to make for the loss of revenue, which protective tariffs entail.

An organized banking system, by pooling together the scattered resources makes funds available for public pur-

poses. An appreciable portion of the internal rupee debt is already held by Indian banks, insurance companies and individual Indian investors. The peculiar nature of investment on long term loans, which insurance requires, falls in best with the peculiar terms for long periods which land mortgages and state borrowings necessitate. Though still in its infancy insurance has great future potentialities. As the unfailing reservoir of the state and the people it is to fill in the void in the field of finance.

The debt burden lightened in part and internal banking facilities improved, there can be an easy transference of debt from abroad when money may largely be available at 3 to 4 per cent. interest. Meanwhile, the world money market is to be open to India so as to enable her to secure loans at competitive rates of interest. Besides a proper regulation of exports and imports secures a high trade balance, and brings about a rise in the commodity prices to largely relieve the situation. In view of trade conditions and currency depreciations all round devaluation of the 18d. rupee ratio so as to confer the amount of protection and depreciation in the respective realms of industry and currency and place us on a par with countries with forty to fifty per cent. depreciation to successfully compete with them to secure a surplus for reducing the debt-burden is the imperative need of the day.



CHAPTER VIII

CONCLUSION

THE contribution, which the scientific West has made for the progress of material civilization is indeed great. But it has made it the aim and end of life. The sooner it recognizes that materiality is a means to an end and not an end in itself, the better it is for it, and the world as well. The blame however does not rest with science but with man, for man is the central figure round which centre all the rest. He is no less the hero than the victim.

If production is to be within the bounds of consumption, if cut-throat competition and dumping are to cease, if equitable distribution of the good things of the Earth is to be secured to all, if trade depressions are to be avoided and world prosperity restored, if trade jealousies and rivalries are to disappear, if science is to serve and not to dominate and destroy man and his work, if human safety and happiness are to grow, if wars are to be averted and civilization saved, there should be a change of outlook on life, a recognition of the spiritual value of things, and a new orientation of Economics. For this unique task no country is better fitted than India with her rich cultural and spiritual inheritance.

She for her part is in need of material advance on sound economic lines best suited to her peculiar conditions and problems. This she can never hope to realize by mere imitation, but by a proper study of things, and a sound assimilation and adaptation of methods to fit in with her aims and ideals, needs and conditions.

India is to evolve a new method, and show that materialism is not inimical to or incompatible with spiritualism, but the one averted of its drift and subordinated to the other is capable of yielding fine fruit that reaches and satisfies all with no hardship, no loss or risk to any.

In her hands the slogan 'back to the land' is to receive a new meaning and significance. Between the forest and

the factory, the ascetic type of life of the old forest-*ashrams* of ancient India and the galling conditions of labour in the modern factories of Europe and America, she is to strike a new path, a middle course where the field replaces both, and where man cooperates with man and Nature for realizing 'the inner unity of all for peace and achievement, for spiritual and physical life.' She is then to extend her healing hand to an aching world.



The End

ERRATA

Page	Line	Instead of	Read
5	23	when as	when
15	26	ripe	rife
18	16-17	investment being	investment
23	11	left	lost
36	5	there	their
44	30	mortgagers	mortgagees
57	28	follows	follows is
57	29	invited	invented
61	18	with	to
61	33	provisions	provision
62	2	is	are
65	4	would	should
66	30	loss	less
66	34	bull	lull
75	28	proviso	purview
76	24	prudence	prudent
85	35	1926	1926
93	†	serves	serve
96	23	and	to
102	23	all man-power	man-power
105	18	either	both
109	6	satisfied	stifled
111	29	art	arts
117	25	draftsman	craftsman
121	13	inside	outside
147	36	and	to
153	31	Indian	Italian
153	32	most	this most
154	26	cotton	cocoon
154	28	last	best
157	29 & 30	average	acreage
163	14	wonders	wonder
163	14	former	farmer
165	12	Strawberry	Gooseberry

Page	Line	Instead of	Read
171	10	Bee-Hiving	Bee-Keepnig
172	6	mils	veils
172	8 & 14	-hiving	-keeping
180	23	olis	oils
181	29	millions	millions of
185	34	such	in such
189	8	enables	enable
191	32	forest	forests
191	34	and	and that
193	14	bate	bare
200	22	they do	do
214	32	all	all is
214	32	powers	power
229	34	realize	release
230	13	bank	banks
256	14	and she	she
257	37	Because	Because of
277	34	concert	concern
279	6	man's	men's
283	23	a half	a half be- fore the depression
287	27	different	deterrent
293	3	Recards	Recardo
295	11	nothing	noting
295	25	being	being half
300	9	connection	connections
300	31	advance	evidence
300	35-36	by slow	not by slow
305	30	land revenue	State revenue

